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ABSTRACT

This evaluation of the Special Milk Program (SMP) was undertaken in order to assess the impact of the free milk provision on the National School Lunch Program (NSLP) and on student milk consumption. Other objectives of the study included (1) assessing milk waste in schools and factors affecting this waste; (2) updating data from previous surveys on school, food, and milk service operations; and (3) determining the impact of the SMP on the demand for milk in schools. Survey data indicate that the free milk provision had a marked impact on the SMP. This provision changed the SMP from a simple subsidization program with a minimum of administrative burden to a complex and administratively difficult program. A number of schools dropped the program because of the free milk provision. The impact of the SMP, in general, and the free milk provision, in particular, on the NSLP was negligible. Survey responses indicated that the availability of the SMP did not serve as a deterrent to a school's inaugurating either the NSLP or the Student Breakfast Program (SBP). Survey data showed that both programs increased levels of student milk consumption. Survey data also showed that 88% of all schools, enrolling 90% of the U.S. school population, participated in at least one of the USDA child nutrition programs in January of 1975. (Author/AM)

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June 1978

SPECIAL MILK PROGRAM EVALUATION
and
National School Lunch Program Survey

by John S. Robinson
Food and Nutrition Service
U.S. Department of Agriculture

The Food and Nutrition Service, U.S. Department of Agriculture, appreciates the cooperation of the 768 randomly selected schools which supplied data for this study and the local school districts and State educational agencies which made data collection possible.

The Food and Nutrition Service also acknowledges the cooperation of the staff of the Statistical Reporting Service, U.S. Department of Agriculture, in developing the survey plan and collecting and processing the survey data.

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SPECIAL MILK PROGRAM EVALUATION
and
National School Lunch Program Survey

SUMMARY

Background and Scope of the Special Milk Program

The Special Milk Program (SMP) was established in 1954 to support dairy prices by providing for increased fluid milk consumption by children in nonprofit schools of high school grade and under. The program was extended 2 years later to include children in nonprofit child care institutions. Schools constitute the principal outlet for SMP milk: in fiscal year 1975, over 95 percent of the milk served through the program was served in schools.

The program has historically operated by providing a Federal reimbursement for each half-pint of milk served to students in participating schools and institutions. In fiscal 1975, this reimbursement was 5 cents per half-pint served. The only milk served to students which does not qualify for this reimbursement is that which is served as part of the meal requirement of National School Lunch Program (NSLP) and School Breakfast Program (SBP) meals. Beginning with fiscal 1975, all schools participating in the milk program were required to serve free SMP milk to needy children, and program reimbursement was extended to pay the full cost of this free milk.

Participation in the SMP grew from 41,094 schools in fiscal 1955 to a peak of 92,016 schools and 6,739 child care institutions in fiscal 1973. In fiscal 1975, 83,732 schools participated in the program. Milk served through the program increased from under 0.5 billion half-pints in fiscal 1955 to a peak of 3.1 billion half-pints in fiscal 1966.

In fiscal 1975 over 2.1 billion half-pints were served through the SMP, with about 0.1 billion of these served in child care institutions. On an average day 11.4 million half-pints were served through the program in schools, reaching about 9.2 million children.

The following table shows the volume of milk served in schools in 1975, by program, as a percentage of the total school milk market, and as a percentage of total fluid milk consumption in the United States.

Milk served in schools	Volume of milk (mil. of lbs.)	Percentage of all milk served in schools	Percentage of total fluid milk consumption in United States
Special Milk Program	1,019	30.4	1.8
National School Lunch Program	2,032	60.7	3.6
School Breakfast Program	148	4.4	0.3
Milk not served under any USDA Child Nutrition Program	150	4.5	0.3
Total--	3,349	100.0	6.0

Study Objectives and Methodology

This evaluation was undertaken to assess the impact of the free milk provision on the SMP and to assess the impact of the SMP, in general, and the free milk provision, in particular, on the NSLP and on student milk consumption. Other objectives of the study included (1) assessing milk waste in schools and factors affecting this waste, (2) updating data from previous surveys on school food and milk service operations, and (3) determining the impact of the SMP on the demand for milk in schools. Findings on this last objective (impact of the SMP on demand for milk) will be presented in a forthcoming report by the Economic Research Service, USDA.

To accomplish these objectives, enumerators of the Statistical Reporting Service, USDA, visited 768 schools in the 48 coterminous States and the District of Columbia in March and April 1975. In addition to collecting data on food and milk service operations in each of the schools visited, enumerators collected information on milk and food consumption from a total of approximately 20,000 students in these schools. Enumerators also conducted a milk waste study in survey schools which participated in a USDA child nutrition program.

Impact of the Free Milk Provision on the Special Milk Program

Survey data show that the free milk provision of Public Law 93-150 had a marked impact on the SMP. The free milk provision changed the SMP from a simple subsidization program with a minimum of administrative burden to a relatively complex and administratively difficult program. The number of schools participating in the Special Milk Program dropped from a peak of 92,016 in fiscal 1973 to 83,732 in fiscal 1975--a drop of 8,300 schools. A substantial number of these schools dropped the program because of the free milk provision of Public Law 93-150.

Determining the precise number of schools that dropped the program because of the free milk provision is difficult, because this was not the only change that occurred in the SMP between fiscal 1973 and fiscal 1975. At the beginning of fiscal 1974, USDA restricted the SMP to schools without food service. This action was reversed by Congress quickly, through passage of Public Law 93-135 in October 1973. Very shortly thereafter Congress enacted Public Law 93-150 (in November 1973) which included the free milk provision. The free milk provision became effective in fiscal 1975.

Several thousand schools that were cut from the SMP by USDA's action at the beginning of the fiscal year had not reinstated the program by January 1974. It is not known how many of these schools failed to reinstate the program because they did not want to implement free milk service. It is likely this was a significant factor. Of those that did reinstate the program, 4,300 schools, enrolling 2.3 million children, dropped the program between January 1974 and January 1975. Over 90 percent of these 4,300 schools discontinued the program rather than implement free milk service. Administrative burdens, including cost, and anticipated difficulty in avoiding overt identification of free milk recipients were the reasons most frequently given for discontinuing the program.

The number of schools that dropped the program due to unwillingness to implement the free milk provision thus appears to fall in the 4,000-8,000 range. In examining schools that dropped the SMP, this study focuses on the 4,300 schools that dropped the program between January 1974 and January 1975.

In those schools dropping the program over this 12 month period, the average charge to students for a half-pint of milk increased from 7.5 cents to 10.7 cents after the program was dropped, while per capita sales of a la carte milk (milk not served as part of the Type A lunch or SBP breakfast) decreased by 35 percent.

Among schools which continued to operate the SMP, implementation of the free milk provision varied widely. Almost 32 percent of all SMP schools served no free milk through the milk program in January 1975. Many respondents in SMP schools which served no free milk indicated they either thought that free milk service was optional or had chosen not to implement it. Although the Food and Nutrition Service (FNS) has made concerted efforts to ensure implementation of free milk service in schools not in compliance with this provision, a fundamental dilemma facing free milk service has yet to be resolved--how to maintain reasonable administrative costs without overtly identifying recipients. Among schools which were serving free milk in January 1975, none reported a service system which appeared to resolve this dilemma and had large scale applicability.

Free milk served under the SMP does appear to help in putting needy children on a par with nonneedy children in terms of total milk consumption. In SMP schools children eligible for free milk consumed approximately the same amount of milk on a 24-hour basis as nonneedy children. Children eligible for free milk, however, received on the average 43 percent more milk at school and 22 percent less milk away from school than noneligibles. Forty-one percent of children eligible for free milk reported consuming more than one carton of milk at school, compared to 16 percent of noneligibles who reported drinking more than one carton of milk. Because the SMP accounts for only 23 percent of all milk served free in SMP schools (the remainder being served via the NSLP and SBP), free milk eligibles would still consume more milk at school than noneligibles if free SMP milk service were discontinued.

Impact of the Special Milk Program on the National School Lunch Program

The impact of the SMP, in general, and the free milk provision, in particular, on the NSLP was seen to be negligible. Survey responses indicate that the availability of the SMP does not serve as a deterrent to a school's inaugurating either the NSLP or the SBP. More important, in schools with both the NSLP and the SMP the availability of low-cost milk through the milk program does not appear to serve as a significant disincentive to a student's participating in the lunch program. The survey data suggest that while the availability of a la carte milk may contribute to lower student participation in the NSLP, the SMP has no greater effect in this regard than does service of unsubsidized, higher priced milk.

The availability of free milk to needy students through the milk program does not appear to serve as a disincentive to a needy student's participating in the NSLP. Although the rate of participation in the NSLP by students approved for free meals was expected to decrease after free milk through the SMP became available, survey data show that the expected decrease did not occur.

Student Milk and Food Consumption

Students in schools with the SMP consumed almost 42 percent more milk at school and 10 percent more milk on a 24-hour basis than did students in schools without the SMP. Since 90% of schools with the SMP also have the NSLP, this higher level of milk consumption may owe more to the NSLP than to the SMP. Survey data show, however, that both programs effect increased levels of student milk consumption.

Another factor associated with increased milk consumption was availability of flavored milk: students in schools with flavored milk consumed about 16 percent more milk at school and 7 percent more milk on a 24-hour basis than did students in schools which did not make flavored milk available. Soft drink availability at school, on the other hand, was associated with slightly decreased milk consumption.

Students eating lunch at school, regardless of food or milk program availability consumed on the average 20 percent more milk in a 24-hour period than did students eating lunch away from school. Students eating the Type A lunch in NSLP schools consumed more milk both at school and on a 24-hour basis than did students eating any other type of lunch.

Analysis of the survey data suggests that the distribution of SMP milk served, according to type of lunch taken, is as follows:

30 percent of SMP milk is consumed by students who eat Type A lunches
12 percent of SMP milk is consumed by students who eat a la carte lunches
43 percent of SMP milk is consumed by students who eat bag lunches
9 percent of SMP milk is consumed by students who eat lunch away from school
6 percent of SMP milk is consumed by students who report eating no lunch

In schools with the NSLP, 19 percent of students in attendance on the day of the survey reported eating a bag lunch brought from home and 8 percent reported eating lunch away from school. In non-NSLP schools, 52 percent of students in attendance reported eating a bag lunch from home, and 23 percent reported eating lunch away from school.

Participation in the NSLP showed a marked decrease with increasing grade levels: 69 percent of elementary students, compared to 51 percent of junior high school students and 40 percent of senior high students, reported eating the Type A lunch in NSLP schools.

In both NSLP and non-NSLP schools, the percentages of students who reported eating bag lunches brought from home decreased with increasing grade levels, while the percentages of students who reported eating a la carte items for lunch and those who reported eating no lunch increased with increasing grade levels. One percent of all elementary students reported eating no lunch on the day of the survey, while 16 percent of senior high schools students reported eating no lunch.

Milk Waste

Milk waste was measured at lunchtime in schools operating one or more of the USDA child nutrition programs. For all USDA program schools, milk waste averaged 11.5 percent. Waste in elementary schools averaged 14.8 percent and in secondary schools 6.1 percent.

The SMP does not appear to contribute significantly toward milk waste. In schools with the SMP and without the NSLP, milk waste averaged only 3.5 percent. Moreover, milk waste measured the same (11.9 percent) in NSLP schools with the SMP as in NSLP schools without the SMP.

Availability of flavored milk was associated with significantly reduced levels of milk waste. For all USDA program schools offering flavored milk at lunchtime, milk waste averaged 8 percent, compared to 14 percent waste in schools not offering flavored milk. The possibility that the decreased level of milk waste in schools offering flavored milk may be accompanied by increased levels of waste of other food products was not examined in this study.

Program Operations

Survey data show that 88 percent of all schools, enrolling 90 percent of the U.S. school population, participated in at least one of the USDA child nutrition programs in January 1975. Only 4 percent of all schools, enrolling 2 percent of the U.S. school population, did not offer any food or milk service in January 1975. Over the 1972-1975 period there was a slight increase both in the number of schools with a USDA program and in the number of schools with food and/or milk service outside of USDA auspices.

Special Milk Program Operations

Montly program data show that almost 82,000 schools in the 48 coterminous States and the District of Columbia participated in the SMP in January 1975. Of the 230 million half-pints of milk served through the SMP in these schools during this month, about 42 million, 18 percent of the total, were served free to needy students. Survey data show that 8.2 million students had approved applications on file to receive SMP milk free during this month. About 29 percent of these students received free SMP milk on a given day, roughly the same percentage as that of students not approved for free milk who bought SMP milk on a given day.

In schools with the SMP, 36 percent of all milk served was served through the milk program. Of all milk served in these schools (including milk served through the NSLP and SBP), 4 percent was served at breakfast, 84 percent at lunchtime, and 12 percent at nonmealtimes. Of milk served through the SMP in these schools, 2 percent was served at breakfast, 66 percent at lunchtime, and 32 percent at nonmealtimes.

The average cost to an SMP school for a half-pint of milk in January 1975 was 9.5 cents, while the average charge to paying students for this milk was 6.1 cents. The margin on milk--the difference between the cost of the milk to the school and the charge to students plus SMP reimbursement for this milk--averaged 1.6 cents per half-pint in January 1975, or double the 0.8 cent margin recorded for January 1974. Federal regulations limiting this margin to 1.0 cents (1.5 cents in exceptional circumstances) were in effect in January 1974 but had been rescinded by January 1975.

Whole white milk constituted 68 percent of all milk served in SMP schools on the day of the survey. Whole flavored milk constituted 21 percent, lowfat or nonfat flavored milk constituted 9 percent, lowfat (unflavored) milk constituted under 3 percent, and skim milk and buttermilk both constituted well under 1 percent of all milk served. Whole white milk was the only type of milk offered in 60 percent of all SMP schools. In the 38 percent of SMP schools which served flavored milk on the day of the survey, flavored milk constituted 70 percent of all milk served.

In January 1975, 45 percent of all SMP schools made milk available once per day, 27 percent made it available twice per day, and 28 percent made it available three or more times per day. Nonmealtime milk service was more prevalent in elementary schools than in secondary schools. A la carte milk sales (SMP milk) showed a direct relationship to the number of milk service periods: as the number of service periods increased, so did per capita sales of SMP milk.

In 65 percent of all SMP schools, milk was the only beverage (other than water) available to students. Sixteen percent of SMP schools made soft drinks available to students, while 26 percent made "other" beverages (fruit juice or other flavored drinks for example) available. Soft drinks and other beverages were available far more commonly in secondary schools than in elementary schools. Per capita consumption of SMP milk was substantially lower in schools offering soft drinks and slightly lower in schools offering "other" beverages than in schools in which milk was the only beverage available to students.

National School Lunch Program Operations

Monthly program data show that about 85,000 schools in the 48 coterminous States and the District of Columbia participated in the NSLP in January 1975. Of the 23 million lunches served daily through the program, over 40 percent were served free or at a reduced price of 20 cents or less. Survey data indicate that 10.6 million students in NSLP schools had approved applications on file to receive free lunches in January 1975. On an average day 82 percent of these students received a free Type A lunch at school. Just over 1.0 million students had approved applications on file to receive reduced-priced lunches. On an average day 68 percent of these students bought a reduced-price lunch. About 42 percent of the 32.6 million students not approved for free or reduced-price meals bought a full-price lunch on an average day in January 1975.

The average price paid by students for a full-price Type A lunch was 45.7 cents in January 1975. In NSLP elementary schools the average price paid was 43.6 cents and in secondary schools it was 49.1 cents. Student participation in the NSLP decreased as the price charged for the Type A lunch increased.

Reduced-price lunches were offered in schools containing over 64 percent of total NSLP enrollment in January 1975. This was a substantial increase in reduced-price availability over January 1974, when only 39 percent of total NSLP enrollment had access to reduced-price lunches. The average price paid for a reduced-price lunch was 17.2 cents in January 1975. (Public Law 94-105, enacted subsequent to this survey, mandated that reduced-price lunches be made available in all NSLP schools.)

Survey data indicate that while onsite preparation of Type A lunches remains the dominant mode, a slow but significant trend toward central preparation and satelliting of Type A lunches is occurring. In January 1975, 22 percent of NSLP schools received the bulk of their food from offsite preparation sources, up notably from the 17 percent figure recorded in the 1972 NSLP Survey. Among students paying the full price for lunch, participation in the NSLP was substantially higher in schools preparing food onsite than in schools receiving food prepared offsite. Participation in the program by free and reduced-price eligibles, however, did not vary significantly by type of food delivery system used.

The number of NSLP schools offering a la carte items in addition to the Type A lunch has grown considerably since enactment in 1972 of Public Law 92-433, which eased previous restrictions on food service in competition with the NSLP. In January 1975 "complete" (traditional) a la carte service was offered in 15 percent of all NSLP schools, up from the 10 percent figure recorded in the 1972 NSLP Survey. "Limited" a la carte (only Type A lunch items and/or dessert items sold separately) was available in an additional 33.5 percent of all NSLP schools in January 1975. Most of the recent growth in a la carte availability has been at the secondary level. Student participation in the NSLP was significantly lower in schools with a la carte service than in schools with no a la carte. Students approved for free, reduced-price, and full-price meals all showed their highest NSLP participation rates in schools without a la carte service and their lowest rates in schools with "complete" a la carte.

Survey data show that in January 1975, 77 percent of all NSLP schools never offered choices on the Type A menu, 68 percent operated on a closed-campus basis (students could not leave the school grounds at lunchtime), and 89 percent publicized their Type A menus in advance. Over 32 percent of all NSLP schools scheduled 25 minutes or less for students to each lunch in January 1975, while only 23 percent scheduled more than 35 minutes. As time allowed students for lunch increased, student participation in the program decreased (perhaps because more time may make it more possible to eat lunch outside of the school).

Other Milk and Meal Service

Almost 18,000 schools which did not participate in the SMP made milk available to students on an a la carte basis in January 1975. Per capita sales of a la carte milk in these schools were 38 percent lower than sales in SMP schools the same month. The average charge to students for a half-pint of milk in these schools was 13.0 cents in January 1975, more than double the average charge of 6.1 cents found in SMP schools.

Approximately 6,400 schools which did not participate in the NSLP in January 1975 did offer food service at lunchtime. Over 6,000 schools which did not participate in the SBP made food available to students at breakfast.

Respondent Comments

Comments on the child nutrition programs by school principals and food service personnel in response to open-ended questions covered the gamut of concerns surrounding the programs at the local level. Changes in commodities supplied by USDA to schools, institution of a universal free lunch program, increased flexibility in the Type A pattern, elimination of the free milk provision of the SMP, and quantity of paperwork were the major areas of concern. Several respondents complained that the frequency of Federal legislative and regulatory changes to the programs imposed severe hardships on local operations.

I. Background

The Special Milk Program (SMP) was established in 1954 to support dairy prices by providing for increased fluid milk consumption by children in nonprofit schools of high school grade and under. The program was extended 2 years later to include children in nonprofit child care institutions. In 1958 Congress recognized specifically the need for improved nutrition among children and directed that the amounts expended under the program should not be considered as amounts expended for price-support programs. The Child Nutrition Act of 1966 continued this program emphasis.

The program has historically operated by providing a Federal reimbursement for each half-pint of milk served to students in participating schools and institutions. The only milk served to students which does not qualify for this reimbursement is that which is served as part of the meal requirement of USDA's National School Lunch Program (NSLP) and School Breakfast Program (SBP) meals.

Prior to fiscal 1975, milk served under the SMP was reimbursed at rates of 2, 3, or 4 cents per half-pint, the actual rate for an individual school depending on whether it participated in the NSLP and whether it served milk as a separately price item. 1/ Public Law 93-347, enacted July 1974, raised and standardized the reimbursement rate for milk at 5 cents per half-pint for fiscal 1975 and provided for an annual adjustment in this rate based on changes in the Consumer Price Index series for food away from home.

Participation in the SMP grew from 41,084 schools in 1955 to 92,016 schools and 6,739 child care institutions in fiscal 1973. Concomitant with this growth in SMP size was a growth in SMP favor in the Congress and with the general public. At the beginning of fiscal 1974, in an attempt to eliminate duplication of child nutrition program benefits, USDA restricted the milk program to schools without food service. This restriction was rescinded by the Congress in Public Law 93-135, enacted October 1973. The number of outlets participating in the program, however, did not return to its former level and fiscal 1974 closed with 84,959 schools and 5,800 institutions participating in the program.

1/ Schools operating as nonpricing outlets (that is, serving milk at no separate charge to students but covering this expense through tuition, etc.) received 2 cents for each half-pint of milk served through the SMP. Schools making a separate charge for milk (pricing outlets) and participating in the NSLP received 4 cents for each half-pint of milk. Schools operating as pricing outlets and not participating in the NSLP received 3 cents for each half-pint of SMP milk.

In fiscal 1975, over 2.1 billion half-pints were served through the program with about 0.1 billion of these served in child care institutions. In schools, over 11. 4 million half-pints were served on an average day, reaching about 9.2 million children. 2/

Milk served in schools	Volume of milk (mil. of lbs.)	Percentage of all milk served in schools	Percentage of total fluid milk consumption in United States
Special Milk Program	1,019	30.4	1.8
National School Lunch Program	2,032	60.7	3.6
School Breakfast Program	148	4.4	0.3
Milk not served under any USDA Child Nutrition Program	150	4.5	0.3
Total--	3,349	100.0	6.0

No major evaluation of the SMP has ever been made. Previous studies, which went into the program in limited detail, reported findings which suggest that in some cases SMP milk may duplicate nutritional benefits of NSLP meals and in other cases may serve to limit student participation in the NSLP.

In November 1973 Congress passed Public Law 93-150 which provides free milk for children eligible for free meals in all SMP schools and institutions. Prior to this time free milk had been available to eligible children under the Special Assistance component of the SMP. This Special Assistance component, however, operated on a very small scale: in the peak month of fiscal 1973, only 119,000 children were served free milk through the program.

2/ Some students take more than one half-pint of SMP milk. Survey day indicate that for every 100 half-pints served through the program on a given day, about 81 different students are reached.

The possibility that the widespread availability of free SMP milk under the new legislation would intensify the supected negative effects of the milk program on student participation in the NSLP was of concern to the Department as the first year of free milk implementation, fiscal 1975, approached. Also of concern were preliminary data which indicated several thousand schools had dropped the milk program because of administrative burdens associated with free milk service. In addition, there were indications that many of the schools that were continuing the SMP had plans to curtail the times and reduce the accessibility of the place of milk service.

It was in large part because of these concerns that the Food and Nutrition Service established as one of its major objectives for fiscal 1975 a comprehensive evaluation of the SMP.

II. Objectives

This study was undertaken with the following five major objectives:

1. Assess the impact of the free milk provision of Public Law 93-150 on the SMP.

2. Assess the impact of the SMP, in general, and the free milk provision, in particular, on the NSLP.

3. Assess student milk and food consumption by determining:

   (a) the sources and amounts of milk and food children consume and factors affecting this consumption.

   (b) which children utilize the SMP, and

   (c) when children prefer to have milk made available and whether schools are meeting these preferences.

4. Determine the extent of milk waste in schools with USDA programs and identify factors associated with this waste.

5. Assess the impact of the SMP on the demand for milk in schools. A report of this assessment will be issued by the Economic Research Service, USDA, in the near future.

In addition to meeting these five specific objectives, the study was undertaken to bring to date information obtained in previous surveys on school food and school milk service operations and to assess changes in these operations. Prior to this study the most recent comprehensive study of school foodservice was the "1972 National School Lunch Program Survey," conducted by the Food and Nutrition Service and the Statistical Reporting Service, USDA. The most recent comprehensive study of milk service was Marketing Research Report, No. 716, "Milk and Milk Products in the Nation's Schools," prepared by the Economic Research Service, USDA, in 1965. Other related literature is cited in the Bibliography.

III. Methodology

A. Description

The sampling frame for this survey was the magnetic tape listing compiled by the Office of Education, DHEW, of the universe of the Nation's public and private schools. Date on the public school universe were current to school year 1972-1973 and on the private school universe to school year 1969-1970.

Sample schools were selected in two stages. Approximately 4,000 schools were chosen for the first stage by simple random selection from the universe. These 4,000 schools were screened at the State Agencies in January 1975 to determine which programs had been in operation in each of these schools during January of 1973, 1974, and 1975. Based on this screening information, the 4,000 schools were then stratified by program history and by program combination. The following five strata were constructed to yield statistically reliable data relating to the main survey objectives (the numbers in parentheses indicate the number of schools in the final sample with the specified characteristics; stratum 1 overlaps with strata 4 and 5):

1. schools which participated in the SMP in January 1974 but had dropped the program by January 1975 (96)

2. schools which participated in both the SMP and NSLP in January 1975 (320)

3. schools which participated in the SMP but not in the NSLP in January 1975 (105)

4. schools which participated in the NSLP but not in the SMP in January 1975, and (204)

5. schools which did not participate in a USDA program in January 1975. (137)

Based on this stratification, the second stage consisted of selecting a subsample of 768 schools in the 48 coterminous States and the District of Columbia for enumeration. A school questionnaire was administered to the school administrator and food service supervisor (where applicable) of each selected school.

Within the primary sampling unit, the school, two separate subpopulations were sampled using the ultimate cluster technique (the ultimate cluster being the school). The first subpopulation sampled was students. Using random number tables and class listings, enumerators selected two classes in each school. In classes randomly selected at

the fourth grade level and below, enumerators administered a Student Questionnaire on a one-to-one basis to five students, selected by use of random number tables and class rosters. A total of approximately 20,000 Student Questionnaires were collected.

The second subpopulation sampled was that of milk containers dispensed during lunchtime. This subpopulation was sampled only in schools participating in a USDA program. In schools with a lunch period of 60 minutes or less, two samples of 20 milk containers each (total sample = 40 containers) were collected. In schools with a lunch period of over 60 minutes duration, 4 samples of 20 containers each (total sample = 80 containers) were collected. Start times for collection of containers were determined by use of random number tables. Samples were taken by collecting 20 milk cartons in consecutive sequence as they were brought to the waste disposal area. Following collection, milk containers were separated and counted according to:

1. completely empty containers
2. partially empty containers
3. unopened containers.

The contents of the partially empty and unopened containers were then measured volumetrically and the measurements recorded on a Milk Waste Tally Sheet.

Sample schools were contacted initially by a presurvey letter, outlining data to be collected. Enumerators from USDA's Statistical Reporting Service made school visits beginning in mid-March 1975. Data collection was completed in 1 month.

The sample was designed to provide reliable national estimates (excluding Alaska, Hawaii, and the outlying Territories).

The survey was conducted prior to realignment of States into seven FNS Regions. Because the survey methodology called for estimates with national validity only, Regional data have been tabulated and analyzed but are not presented in tabular format in this report. Where reference is made to Regions in the narrative of this report, the five FNS Regions existing prior to realignment are at reference.

Individual data items and totals have been rounded independently in this report. Percentages are based on unrounded numbers.

Copies of the School Questionnaire, the Student Questionnaire, and the Milk Waste Tally Sheet may be found in the appendix. Due to its bulk (60 pages) a copy of the Interviewer's Manual is not included in this report.

Due to limitations of space, only a fraction of the output tables produced for this study are presented in this report. With few exceptions tabulations of data by elementary and secondary breakdowns are not included, although attention is paid in the narrative to differences between elementary and secondary data. Persons desiring to see available tabulations not presented in this report should contact the Child Nutrition Division, Food and Nutrition Service, U. S. Department of Agriculture, Washington, D. C. 20250.

B. Discussion

Survey Restrictions

Although the SMP operates in child care institutions and summer camps as well as in schools, the only SMP outlets surveyed in this evaluation were schools. This was done to minimize survey problems, such as compiling a universe listing of child care institutions and summer camps, and in recognition of the fact that over 95 percent of the milk served through the SMP is served in schools. To lower costs, schools in Alaska and Hawaii were excluded from the sampling frame. Schools in these States account for only one-tenth of one percent of SMP activity (total half-pints) and seven-tenths of one percent of NSLP activity (total lunches). All findings in this report relate only to the 48 coterminous States and the District of Columbia.

The original design for this evaluation called for determining the impact of the SMP on the SBP. This would have necessitated enumeration of a large number of SBP schools and, consequently, a substantially larger sample size than the one actually employed. To minimize respondent burden and survey expense, and in consideration of the likelihood that any impact of the SMP on a feeding program would be greater on the NSLP than on the SBP, the objective of determining the impact of the SMP on the SBP was eliminated. A relatively small number of SBP schools fell into the sample, however, and a short section of this report concerns operations of the SBP.

To restrict the methodological problems to manageable proportions and for reasons of expense, several areas of potential interest in examining the SMP were not studied. Chief among these is the role milk plays in the total dietary intake of students: e.g., whether students drinking smaller than average amounts of milk receive adequate amounts of milk-related nutrients through consumption of greater than average amounts of other foods. Given the current state of the art of measuring nutrition, such a study is probably not possible at present; without this nutritional information, however, one cannot determine whether the increased levels of milk consumption effected by the SMP and the other child nutrition programs do, in fact, lead to improved nutrition. Moreover, without this information, a complete cost-benefit analysis of these programs cannot be made.

Also of interest but not examined was the relationship of milk consumption to food waste. For instance, while flavored milk was discovered to be associated with decreased milk waste and increased milk consumption, no determination was made of the level of food waste associated with flavored milk service. Some anecdotal information suggests that service of flavored milk may lead to increased food waste.

Elementary-Secondary Classification

Schools with prekindergarten through sixth grades were classified as elementary and those with seventh through twelfth grades as secondary. Schools with grades on both sides of the sixth-seventh grade breakpoint were classified as elementary or secondary according to the level at which the majority of students were enrolled. This method of classifying elementary and secondary yielded data which show 70.9 percent of all schools with 55.7 percent of total enrollment were at the elementary level in January 1975. Data from the Office of Education, DHEW, show 52.9 percent of enrollment in school year 1974-1975 was at the sixth grade level or below.

Data from the Student Questionnaire were aggregated into elementary and secondary categories according to the actual grade of the student respondent, using a sixth-seventh grade breakpoint.

Milk Consumption Questions on the Student Questionnaire

On the Student Questionnaire students were asked to report the number of "cartons or glasses" of milk they drank (a) at school and (b) away from school. No standard measure of the volume of a carton or glass was provided. The objective was not to measure in absolute terms milk consumption by children but rather to measure relative differences in student milk consumption. Thus, the discussion in this report focuses on percentage differences rather than absolute differences in student milk consumption. It is worth noting, however, that if the "carton or glass" referred to in the survey question is assumed to be of a standard 8 ounce size, then the average daily milk consumption figure recorded in this survey for students in SMP schools (3.07 cartons or glasses = 24.6 ounces) is very close to the 26.1 ounce daily consumption figure recorded for students in SMP schools in a 1960 USDA study [4], 3/ which used a considerably more detailed recall method to measure student milk consumption.

3/ Numbers in brackets refer to items in references at the end of this report.

No attempt was made in analyzing the survey data to reconcile at-school milk consumption by students as recorded on the Administrative Questionnaire with at-school consumption reported on the Student Questionnaire. Because no definition of the size of a "carton or glass" of milk was provided on the Student Questionnaire, such a reconciliation was not possible. Moreover, at-school consumption of milk as reported on the Student Questionnaire included milk brought from home to school, and no data on the volume of this milk was collected. While bias could have been introduced into the Student Questionnaire results by students' differing perceptions of the size of a "carton or glass" of milk and by the tendency of students to overreport milk consumption, analysis of the Student Questionnaire data assumed that the large number of students sampled would tend to minimize any such bias and that any such bias would not be specific to the variables of interest.

Because a positive value is placed on children's milk drinking in our society, children have a tendency to overstate their actual milk consumption. To circumvent this as much as possible, two questions relating to milk consumption were asked on the Student Questionnaire. The first asked for the student's milk consumption "most of the time." The second asked for the student's consumption "yesterday." It was hoped that the first question on daily consumption "most of the time" would absorb much of the tendency to overstate consumption and the response to "yesterday's" consumption would be a better reflection of the true level of consumption.

Survey data show that for all schools milk consumption at school measured 11 percent greater on the "most of the time" question than on the "yesterday" question. Milk consumption away from school measured 18 percent greater and total daily consumption 16 percent greater on the "most of the time" question than on the "yesterday" question. Interestingly, a direct relationship was seen between overreporting "most of the time" consumption and grade level of students: that is, as grade level increased so did the discrepancy between "most of the time" consumption and "yesterday" consumption.

In tabulating the survey data for this report, consumption of milk was taken from the responses to the "yesterday" question only.

Sampling Frame Problems

The DHEW magnetic tape listings of the U.S. public and private school universe, the frame for this survey, presented several problems. For one, the tape listings were 2 years old for public schools and 5 years old for private schools. This excluded from the sample any schools which had opened during the intervening years. Moreover, due to school consolidations, school name changes, and school address changes during the intervening years, difficulty was encountered in many cases in locating the sample school selected from the DHEW tapes.

Another problem presented by the DHEW listings involved the Office of Education (OE) method of classifying a school. The OE method considers as two schools a building which, say, houses 100 students grades 1-12 and in which one person is responsible for administration of grades 1-6 and another administrator is responsible for grades 7-12. Thus, this hypothetical building would be recorded on the OE listing as two schools, one elementary and one secondary. Other than enrollment data for these "two" schools, however, no other survey data, such as meal counts, were available by grades 1-6 and grades 7-12 breakouts. In instances where one of these "two" schools fell into the survey sample, information was collected for both the elementary and secondary units and the expansion factor for the school was halved. 4/

Record Problems

A total or partial lack of food service records was encountered in a sizable number of schools. Data elements on the administrative questionnaire for which records were most frequently lacking were (a) the number of students with approved applications on file for free and reduced-price meals in January 1974 and January 1975 and (b) meal and milk counts for January 1974. Where records could not be located estimates were made using day-of-survey or January 1975 data. This procedure may have led to a misstatement, probably an understatement of changes which occurred between January 1974 and January 1975.

In addition to these data problems, an extremely low level of awareness of the SMP by school-level personnel was encountered. This first became evident in a quality-assurance review of completed questionnaires early in the data collection period. Five questionnaires from schools which screening showed to have dropped the milk program between January 1974 and January 1975 were among those reviewed.

4/ A current U.S. school universe listing, compiled by a private contractor, was obtained by FNS after this survey. This new listing is frequently updated and does not employ the OE method of counting twice single-building schools with separate administrators for differing grade levels. This new listing will serve as the sampling frame for future FNS studies in schools.

Of those five schools, four reported never having been in the milk program. Other data on these questionnaires (e.g., a sharp rise in the charge to students for milk) indicated and subsequent followup confirmed that these schools had, in fact, participated in the SMP in January 1974.

Despite immediate measures taken to ensure that this information was being correctly reported, in the entire sample less than 50 percent of the schools which had dropped the milk program between January 1974 and January 1975 reported at the enumerator visit that they had participated in the program in January 1974. It was only through extensive followup, generally at the district level, that these schools' participation in the program in January 1974 could be established.

A similar problem occurred in schools which the screening showed to be milk program participants for the past 3 years. Many of these schools reported that they had initiated the program in the survey year. In these schools it was evident that the school-level personnel identified the SMP with free milk service.

The unexpectedly low profile of the SMP among school-level personnel caused a considerable burden on the Statistical Reporting Service's field editors and supervisors and, to a lesser degree, on the Food and Nutrition Service's Regional Office personnel. Their excellent response to the problem was critical in ensuring quality of the survey results.

In followup on those schools with discrepancies between program status as reported in the State Agency records during the January screening and as reported at the school in the survey visit, it became apparent that knowledge of a particular school's participation in the SMP prior to fiscal 1975 had frequently not passed down to the school but stopped at the district-level. While a handful of schools in which localities provided a subsidy for milk were visited, a somewhat larger number erroneously reported that the SMP reimbursement was not a Federal but entirely a local subsidy. The introduction of free milk service under the SMP and the concomitant certification and reporting paperwork, however, appear to have raised considerably the profile of the SMP at the local school level.

IV. Impact of the Free Milk Provision on the Special Milk Program

Changes in Program Status

Survey data indicate over 4,300 schools with a total enrollment of over 2.3 million students discontinued participation in the SMP between January 1974 and January 1975. Almost 80 percent of these schools were at the elementary level. Over 85 percent of the schools discontinuing the SMP participated in the NSLP. Just under 10 percent of schools dropping the program were schools without food service. Schools dropping the program were clustered in a handful of States, the Southeast Region having the highest number of dropouts with the Midwest and Western Regions having the least number of dropouts.

Open-ended questions were asked school administrators and cafeteria managers to obtain reasons for dropping the milk program. Due to the previously discussed problem (Section III) of school officials being unaware of their schools' previous participation in the program, reasons for dropping the program were furnished in only about two-thirds of the sample schools which did discontinue participation in the SMP between January 1974 and January 1975.

In schools in which reasons were furnished, in over 90 percent concerns over or anticipated problems with the free milk provision were cited as responsible for the decision to drop the program. Administrators in the few schools which did not cite the free milk provision indicated that concerns such as erratic or sharply increasing milk prices from suppliers, long delays in receiving reimbursement checks, and lack of student demand for milk were behind their discontinuing the program.

In those schools in which problems associated with the free milk provision were cited as responsible for the decision to drop the program, the expressions used most often to describe these problems were "too much red tape" and "too much time spent for what we would get back." In these schools, administrators and cafeteria managers indicated that "excessive regulations," an "unrealistic amount of paperwork," and the "accountability problem" of separating the number of half-pints of milk served by "free" and "paid" caused them to leave the program.

A number of respondents stated that the cost to the school of administering the free milk provision was too high to allow for continuation of the program. Costs cited as associated with free milk service included those for printing milk tickets, keeping a count of milk served by type of recipient, and--in schools without the NSLP or SBP--printing, mailing, and processing free milk applications. Several officials reported they would have had to add personnel to their staff in order to implement free SMP milk service.

The second most frequently cited reason for discontinuing the milk program was that of problems in protecting the identity of free milk recipients. About one-third of the respondents cited this problem, stating they could find no effective way to serve free milk without overtly identifying recipients. Due to the costs involved, many administrators ruled out the use of separate milk ticket systems. Several of these administrators stated that the logistics of free milk service were simply impossible if reasonable administrative costs were to be maintained and overt identification of free milk recipients avoided.

Various other reasons for dropping the program, associated with free milk service, were cited by small numbers of respondents. Chief among these were:

- service of a second (free) half-pint of milk is nutritionally unsound--it would cause children to pass up lunch nutrients not supplied by milk
- potential resentment of free milk recipients by paying children
- insufficient lead time given to implement free milk service

In those schools which dropped the milk program between January 1974 and January 1975, the average cost to the school from suppliers for a half-pint of milk (all types, weighted) increased from 9.2 cents to 9.4 cents, a 2 percent increase. The average charge to students for a half-pint of milk (all types, weighted) in these schools increased over the same period from 7.5 cents to 10.7 cents, a 41 percent increase. Per capita sales of a la carte milk (i.e., milk not served as part of the Type A lunch or SBP breakfast) decreased by 35 percent.

Of the 4,300 schools which dropped the SMP between January 1974 and January 1975, about 640 expected at the time of the survey to renew participation in the program by April 1977.

Implementation of the Free Milk Provision and Changes in Program Operations

Contrary to early reports that schools were planning to reduce milk availability in response to the free milk provision, survey data show that availability of milk remained very stable between January 1974 and January 1975 in SMP schools. These early reports suggested that milk availability would be reduced by a curtailment in the times of milk service and a reduction in the accessibility of the place of milk service. In fact, a very slight change in the times of milk service is discernible in the survey data, this change being in the direction of increased milk availability. No change in the place of milk service between the two time periods is indicated by the survey data.

Implementation of the free milk provision was found to vary widely from Region to Region and within Regions. Figure I, compiled from regular monthly reports, shows the percentage of free milk of total milk served in schools in the SMP and the percentage of free lunches of total lunches served in schools in the NSLP, by Region in April 1975. As can be seen, only in the Southeast Region does the percentage of free SMP milk approach the percentage of free NSLP lunches. The West-Central Region shows the next closest relationship between the two, while the Northeast, Midwest, and Western Regions each show a percentage of free milk of total SMP milk less than half that of free lunches of total NSLP lunches.

The open-ended question "What method(s) does this school use to protect the identity of free milk recipients?" was included in the survey questionnaire in an attempt to catalog the various systems schools use to serve free milk and to account for some of the Regional differences in free milk implementation. The highly disparate quality of responses to this question, however, rendered a statistical cataloging of these methods impossible. It was apparent that use of a separate milk ticket or token system was rare. The most frequently reported method of serving free milk was that of offering a second half-pint of free milk (in addition to the half-pint served with the Type A lunch) to free lunch recipients as they passed through the lunch lines in schools with both the NSLP and the SMP. No system was reported which appeared to be especially successful: i.e., easy to implement and protective of the identity of free milk recipients.

There was a high degree of confusion and apparent misinterpretation of requirements for participation in the SMP. Nationally, survey data indicate 31.8 percent of SMP schools did not serve any free milk in January 1975. Regionally, the Southeast Region had the lowest percentage of schools reporting no free milk served, which is consistent with the program data showing this Region had the highest percentage of free milk of total SMP milk.

A number of respondents indicated that they either thought the free milk provision was optional or had chosen to ignore it. Several stated that free SMP milk was being offered only in elementary schools or only in selected grades in their districts, although all grades in the district were receiving low-cost milk subsidized by the SMP. Respondents in a handful of schools participating in both the SMP and NSLP stated that free milk was not being offered under the milk program but that unopened containers of milk left by children taking the Type A lunch were being made available free to needy children at lunchtime. In some schools, the leftover NSLP milk was redistributed at no charge to any child who had taken the Type A lunch, and SMP milk was sold only to children bringing bag lunches.

Figure 1

Comparison of Free Meals vs. Free Milk

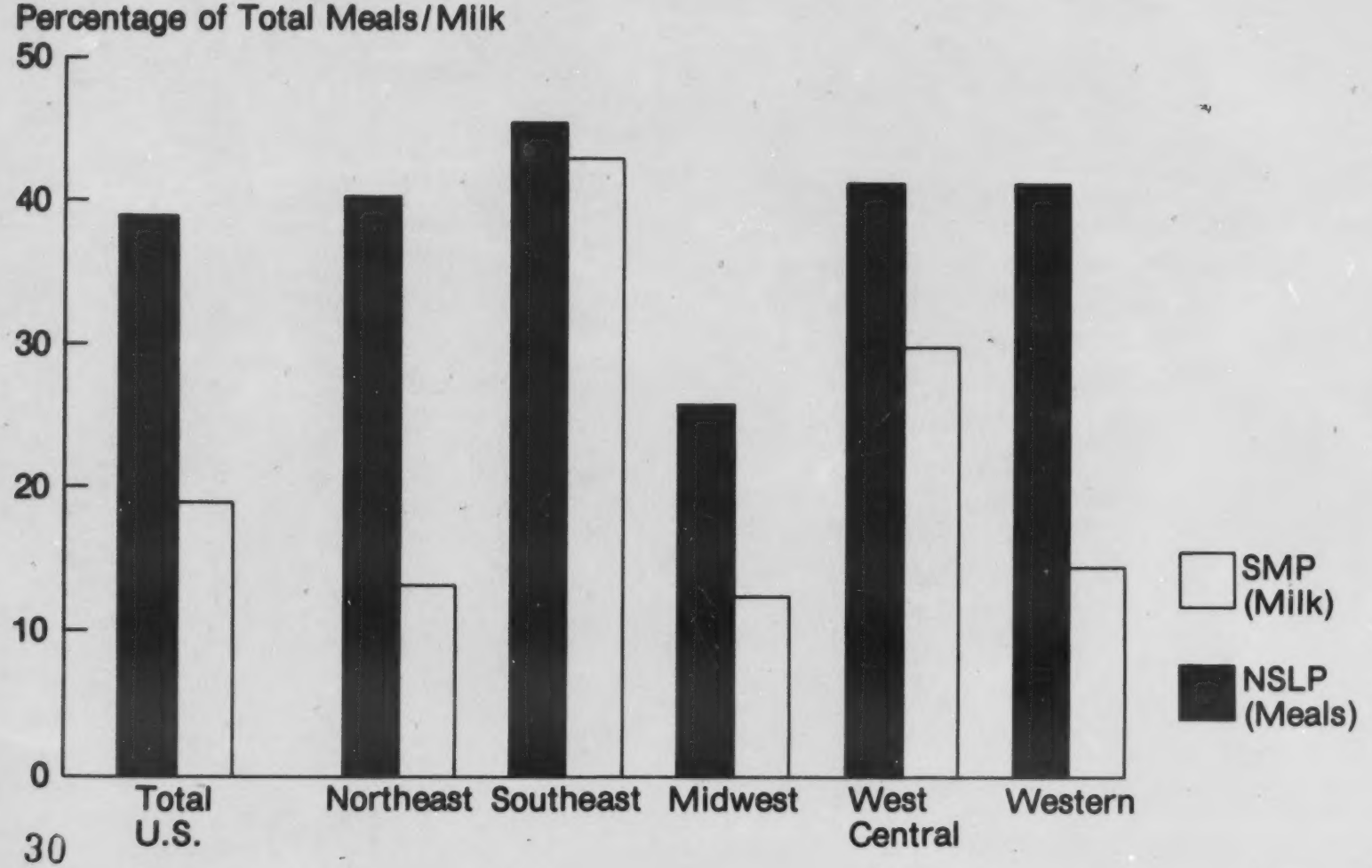

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Table 1 Number and Enrollment of Schools That Dropped the SMP

	Schools Dropping The SMP Between January 1974 And January 1975				
	Total	With NSLP	With No Food Service	Elementary	Secondary
Number of Schools	4,347	3,732	423	3,438	909
Enrollment (Millions)	2.31	2.08	0.15	1.49	0.82
Mean Enrollment	531	557	346	434	897
Number of Schools Continuing to Make A La Carte Milk Available in January 1975	4,080	3,545	343	3,208	872

Note: in this and subsequent tables, due to rounding individual items may not add to totals.

Table 2 Distribution Of SMP Schools By Percentage Of SMP Milk Served Free In January 1975

	Percentage of SMP Milk Served Free					
	No Free Milk	0.1%-25.0%	25.1%-50.0%	50.1%-75.0%	75.1%-99.9%	All Milk Free
Number of Schools	25,347	33,268	8,373	6,147	3,907	2,762
- Percent of Schools	31.8%	41.7%	10.5%	7.7%	4.9%	3.5%
Enrollment (Millions)	12.76	17.07	3.86	4.40	1.39	1.15
Mean Enrollment	503	513	461	716	355	418
Percentage of Enrollment With Approved Applications on File to Receive Free Milk	14%	13%	19%	37%	55%	92%
ADH-P/ADA	0.23	0.34	0.31	0.38	0.29	0.40

V. Impact of the Special Milk Program on the National School Lunch Program

Those interested in extending the nutritional benefits of the lunch and breakfast programs have in the past expressed concern that the availability of milk under the SMP might dissuade some school officials from initiating the NSLP or the SBP in SMP-only schools. School administrators' responses to the survey questionnaire indicate that SMP availability rarely serves as a deterrent to a school's inaugurating either of these two feeding programs. In only one sample school was participation in the SMP citated as a reason for not initiating the SBP. On the other hand, two sample schools cited inauguration of the SBP as a reason for having discontinued the SMP.

A more frequently expressed conern has been that in schools with both the milk and lunch programs the availability of SMP milk might serve as a deterrent to student participation in the NSLP. The argument here has been that for children accustomed to bringing bag lunches to school or buying a la carte lunches, the availability of low-cost milk under the SMP has the effect of increasing the appeal of these bag or a la carte meals and diminishing the chance that these children will eat a Type A lunch. While the survey data presented below are not entirely conclusive on this point, they strongly suggest that the SMP exerts no significant competitive effect on student participation in the NSLP. 5/

Student participation in the NSLP measured 56 percent of average daily attendance in January 1974 in schools participating in both the NSLP and the SMP. In schools participating only in the NSLP in January 1974 lunch participation measured 60 percent. A difference-of-the-means test showed no statistically significant difference here. Moreover, in NSLP schools without the SMP but with other milk service in January 1974 the lunch participation rate was 55 percent--1 percent lower than that in NSLP-with-SMP schools. This suggests that while the availability of a la carte milk may contribute to lower participation in the NSLP, the SMP, per se, has no greater effect in this regard than does service of unsubsidized, higher-priced milk. 6/

5/ This tends to confirm the findings of three previous studies, [6], [9], and [10], which examined the impact of the availability of low-cost milk on student participation in the NSLP and found either no impact or no statistically significant one.

6/ The lunch participation rates for January 1975 in NSLP-with-SMP versus NSLP-with-other-milk-service schools do suggest that the SMP has a depressing effect on student participation in the NSLP. However, these latter rates are biased as an indicator of SMP impact on the NSLP by the fact that 35 percent of these NSLP-with-other-milk-service schools in January 1975 were NSLP schools which had dropped the SMP within the previous year and which, as a group, had an average NSLP participation rate in both years some 20 percent higher than did NSLP schools which maintained the SMP in both 1974 and 1975.

Data from NSLP schools which dropped the SMP between January 1974 and January 1975 further suggest that the SMP does not lower student participation in the NSLP. In these schools the student participation rate in the lunch program increased after the SMP was discontinued by 1.5 percent (from 74.1 percent in January 1974 to 75.6 percent in January 1975), a difference lacking in statistical significance at accepted confidence levels. Participation in the lunch program in NSLP schools with other-than-SMP milk service both years increased by about the same percent (1.4) over this period of time; and in NSLP schools which maintained the SMP in both January 1974 and January 1975 participation increased by some 0.8 percent. Before drawing any final conclusions from these data, however, it should be noted that the already high NSLP participation rate (74.1 percent) in schools which dropped the SMP did not provide an ideal base from which to measure a participation change due to SMP discontinuance.

Another focus of this inquiry was on assessing the possible effects of newly mandated free SMP milk on student participation by free eligibles in the NSLP. There had been concern that students eligible for free lunches in schools with both the SMP and the NSLP might participate less frequently in the NSLP after free milk became available to them through the SMP. Survey data show that there was no decrease in participation by free eligibles in the NSLP in January 1975 (when free SMP milk was available) compared to January 1974 (when there was no free SMP milk). In fact, in schools with both the SMP and the NSLP in January 1974 and January 1975 participation in the lunch program by free eligibles (as expressed by: average daily lunches served free/number of students approved for free lunches) actually increased, from 80 percent in January 1974 to 82 percent in January 1975. Poor recordkeeping on the number of free eligibles in 1974, however, clouds the reliability of this finding (see Section III).

One further area of inquiry as to possible effects of the SMP on the NSLP was that of milk waste. Detailed findings on this are presented in Section VII of this report. To briefly summarize these findings here: no additional lunchtime milk waste was found in NSLP schools which participated in the SMP over that found in NSLP schools without the SMP. Milk waste measured 11.9 percent in both types of schools. This suggests that the presence of the SMP does not increase milk waste over and above that associated with the NSLP. The possibility that the additional milk consumption effected by the SMP increases food waste in NSLP schools was not examined in this study.

Table 3 Student Participation in the NSLP, January 1974 and January 1975, As A Function of A La Carte Milk Service Availability

	NSLP Schools			
	With SMP In Both January 1974 And January 1975	With Other Milk Service In Both January 1974 And January 1975	Schools With SMP In January 1974 and Without SMP In January 1975	
			Total	With Other Milk Service In January 1975
Number of Schools	68,455	5,896	3,732	3,545
ADA - January 1974 (Millions)	33.095	3.147	1.865	1.729
ADA - January 1975 (Millions)	33.125	3.163	1.911	1.768
ADL - January 1974 (Millions)	18.103	1.696	1.382	1.281
ADL - January 1975 (Millions)	18.384	1.749	1.445	1.331
ADL/ADA - January 1974	54.7%	53.9%	74.1%	74.1%
ADL/ADA - January 1975	55.5%	55.3%	75.6%	75.3%

VI. Student Milk and Food Consumption

A. Student Milk Consumption

Tables 4 through 11 present the survey data on student consumption of milk. Student milk consumption was examined for its relationship to program availability, grade of student, sex of student, soft drink availability, flavored milk availability, eligibility of student for free SMP milk, and type of lunch eaten. The following summarizes the findings.

Program Availability

A very significant difference in student milk consumption was apparent between students in schools participating in the SMP and students in schools not participating in the milk program. Mean away-from-school consumption was almost identical in both types of schools (2.06 certons or glasses in SMP schools versus 2.08 in non-SMP schools), but students in schools with the milk program consumed almost 42 percent more milk at school than students in schools without the program (1.02 versus 0.72 cartons or glasses). This relationship was seen at all grade levels, by male and female breaks, and by Regional breaks. On a 24-hour basis (at school and away-from-school consumption combined),.students in schools with the SMP consumed almost 10 percent more milk than did students in schools without the program (3.07 versus 2.81 cartons or glasses).

The higher level of student milk consumption in SMP schools may owe more to the NSLP than to the SMP (bearing in mind that almost 90 percent of the schools which participated in the SMP also participated in the NSLP). In schools which participated in the NSLP but not in the SMP, student milk consumption at school was almost 30 percent higher than student consumption in schools which participated in the SMP but not in the NSLP (0.93 versus 0.72 cartons or glasses). However, away-from-school consumption in these SMP-without-NSLP schools was almost 37 percent higher than that found in NSLP-only schools (2.56 versus 1.87 cartons or glasses).

The relatively greater contributory role of the NSLP in increasing at-school milk consumption may also be seen in the fact that while at-school consumption was approximately the same in schools with the NSLP as in schools with the SMP (1.03 versus 1.02 cartons or glasses), in schools without the NSLP at-school consumption was over 20 percent lower than at-school consumption in schools without the SMP (0.57 versus 0.72 cartons or glasses). The fact that students in schools without either program had the lowest rate of at-school milk consumption (0.47 cartons or glasses) measured in this study is further evidence that both programs increased levels of milk consumption at school.

Grade of Student

Over all schools, student milk consumption at school was seen to peak in the prekindergarten-3 grade break, then decline steadily through the 9-12 grade break. Consumption of milk away from school peaked in the 4-6 grade break, then declined through the higher grades. Total daily consumption (at-school and away-from-school combined) by grade took the form of a bell curve, rising through the early grades, peaking and plateauing in the middle grades, then declining from the ninth through twelfth grades. Because no standard measure of a carton or glass was provided, neither this curve nor any of the grade-related figures cited here should be taken as a fully accurate reflection of students' absolute milk consumption. Younger students may well drink milk from smaller containers or containers less filled than do older students, or they may have a greater tendency to overreport their milk intake than do older students.

Program availability showed a definite relationship to grade-related milk consumption. While student milk consumption at school declined steadily from the lowest major grade break (prekindergarten-3) to the highest major grade break (9-12) in schools with and schools without the SMP the decline was only 9 percent in SMP schools as opposed to the 28 percent decline seen in schools without the SMP.

Male-female differences in grade-related milk consumption were pronounced and are discussed in the following paragraph.

Sex of Student

Over all schools, at-school consumption of milk by males increased slightly from the elementary to the secondary grades, while away-from-school consumption increased more sharply. At-school milk consumption by females, on the other hand, declined steadily from a peak of 0.95 cartons or glasses in the prekindergarten-3 grade break to a low of 0.54 cartons or glasses in the 9-12 grade break. Away-from-school consumption by females peaked in the late elementary grades then declined sharply through the secondary grades. For all schools, at-school consumption of milk by males averaged 33 percent greater than that by females; away-from-school consumption by males was 23 percent greater than that by females; and total daily consumption of milk by males was some 26 percent greater than that by females. Program availability appeared to have almost no effect in altering this relationship of male to female consumption of milk.

Soft Drink Availability

Availability of soft drinks at school was associated with slightly decreased overall milk consumption, but with substantially decreased consumption of SMP milk. Soft drinks did not appear to be affecting participation in the school lunch program to any significant degree but did affect the purchase of individual cartons of milk separate from the school lunch. Soft drink availability was determined only in schools with the SMP. In these schools, students with access to soft drinks at school consumed 6 percent less milk overall (through both NSLP and SMP) at school than did students in SMP schools which did not make soft drinks available (1.03 versus 0.97 cartons or glasses). Away-from-school consumption of milk was almost identical for both groups (2.06 versus 2.05 cartons or glasses). While the difference in at-school consumption of milk was slight between students with access to soft drinks and those without access, this difference was consistent across Regions.

Flavored Milk Availability

Flavored milk availability was associated with slightly increased student milk consumption. Students in schools which offered flavored milk consumed about 17 percent more milk at school than did students in schools which did not make flavored milk available (1.04 versus 0.89 cartons or glasses), and they consumed 7 percent more milk in a 24-hour period (3.13 versus 2.93 cartons or glasses). While the level of milk consumption associated with flavored milk availability was only slightly higher than the level associated with lack of access to flavored milk, this relationship was seen in all program combinations and across all Regions.

Eligibility for Free SMP Milk

Eligibility for free SMP milk was determined in SMP schools for each student respondent by cross-checking the name on the student questionnaire against the school's list of approved free milk applicants. This determination of free milk eligibility was not tantamount to a determination of free SMP milk reception, since almost 32 percent of SMP schools served no free milk through the milk program in January 1975. Many free milk eligibles received milk free through the lunch program (and some through the breakfast program) but not through the milk program. Many of the SMP schools which served no free SMP milk did report substantial numbers of students with approved applications on file to receive free milk.

In schools participating in the SMP, children eligible (and approved) for free milk consumed approximately the same amount of milk on a 24-hour basis as children not eligible (3.01 cartons or glasses for free-eligibles versus 3.09 for non eligibles). However, children eligible for free milk received 43 percent more milk at school and 22 percent less milk away from school than non-eligibles. Only 12 percent of children eligible for free milk did not drink any milk at school, as opposed to a 27 percent figure for non-eligibles. More significantly, 41 percent of children eligible for free SMP milk consumed more than one carton of milk at school, in contrast to 16 percent of non-eligible students who reported drinking more than one carton.

It is clear that the milk served free through the NSLP and SBP to children eligible for free SMP milk plays a greater role in increasing at-school milk consumption by these free-eligibles than does the milk served free through the SMP. Almost 88 percent of children eligible for free milk in SMP schools and in attendance on the day of the survey received a Type A lunch (which included one half-pint of milk) on that day. Over all SMP schools, survey data show only 23 percent of all half-pints served free were served via the SMP; 68 percent were served via the NSLP and 9 percent via the SMP. Therefore, if service of free milk through the SMP were discontinued and children currently receiving free SMP milk bought no SMP milk, a 23 percent reduction in at-school consumption by free-eligibles would be expected. In this case, at-school consumption reported by these free-eligibles would stand at 1.03 cartons or glasses--some 10 percent higher than at-school consumption by children not eligible for free milk. Moreover, if free SMP milk were eliminated, some of the children currently receiving this free milk would be expected to purchase low-cost SMP milk, which would further raise their average at-school consumption. In addition, some substitution of milk consumed away from school for milk formerly received free at school would be likely.

The impact of the free milk provision of the SMP on student milk consumption should be most clearly discernible in SMP schools not participating in the NSLP or SBP. However, free milk eligibles (with approved applications on file) constituted only 3 percent of enrollment in these schools and, thus, provided a very small sample of respondents to the student questionnaire. Nevertheless, student questionnaire responses from these SMP-only schools indicate an at-school milk consumption rate for free-eligibles 77 percent higher than the corresponding rate for children not eligible for free milk. Away-from-school consumption by free eligibles measured only 7 percent less than consumption by non-eligibles in SMP-only schools. Over a 24-hour period free-eligibles in SMP-only schools reported consuming 12 percent more milk than non-eligibles. These findings must be tempered, however, by reiterating that the number of free-eligibles surveyed in SMP-only schools was small.

One further finding of interest in examining milk consumption by free-eligibles is that while 13 percent of children not eligible for free SMP milk reported brining milk from home to school at some point during the school year, only 3 percent of free milk eligibles reported bringing milk to school.

Type of Lunch Eaten

Students eating the Type A lunch consumed more milk by far at school than did students eating any other type of lunch and slightly more milk on a total daily basis (at-school and away-from-school combined). Students bringing bag lunches from home or buying a la carte items at school consumed considerably less milk at school but almost as much milk on a total daily basis as students taking the Type A lunch. This suggests that the milk served with the Type A lunch acts to a significant extent as a substitute or replacement for milk that would otherwise be consumed at home.

The most significant difference in milk consumption was seen between students eating lunch away from school and those eating lunch at school. While at-school milk consumption was expected to be and was in fact much greater for students eating lunch at school, total daily consumption was, unexpectedly, also higher--about 20 percent higher--for students eating lunch at school than for students eating lunch away from school. Higher total daily milk consumption by students eating lunch at school, compared to those eating away from school, was seen in schools with and without USDA programs and at elementary, secondary, and Regional breaks.

B. Students' Lunchtime Food Consumption

Tables 12 through 14 present the survey findings on students' lunchtime food consumption. The following summarizes these findings.

In schools with the NSLP, 59 percent 7/ of students in attendance on the day of the survey reported eating only the Type A lunch on that day, 6 percent reported eating only a la carte items for lunch, 19 percent reported eating only a bag lunch brought from home, 3 percent reported eating lunch from more than one of the above sources (e.g., bag lunch and a la carte items), 8 percent reported eating lunch away from school, and 5 percent reported eating no lunch.

7/ This 59 percent figure is somewhat higher than the 57 percent ADL/ADA figure derived from the Administrative Questionnaire but the same as the lunch participation figure from the Administrative Questionnaire, when students in organized programs which prevented them from eating lunch at school are excluded from the denominator. It is likely that many of these students in organized programs were not available to respond to the Student Questionnaire. In addition, pretests of the questionnaire indicated a slight tendency for students to indicate they ate a "complete school lunch" (Type A) when, in fact, their lunch was bag or a la carte.

Participation in the NSLP showed a marked decrease with increasing grade levels: 69 percent of elementary students (grades prekindergarten - 6) in NSLP schools reported eating only the Type A lunch; this figure fell to 51 percent at the junior high school level (grades 7-9) and 40 percent at the senior high school level. Similarly, bag lunches in NSLP schools showed a significant decrease with increasing grade levels: 22 percent of elementary school students reported eating only a bag lunch, compared to 18 percent of junior high school students and 13 percent of senior high school students. A la carte items, on the other hand, gained prevalence with increasing grade levels, constituting only 1 percent of elementary lunches but 13 percent of secondary lunches in NSLP schools. The percentage of students eating lunch at home remained steady across grades in NSLP schools, measuring 6 percent at both the elementary and secondary levels. In one of the most surprising findings, the percentage of children in NSLP schools who reported eating no lunch increased dramatically from only 1 percent at the elementary level to 8 percent at the junior high school level to 17 percent at the senior high school level.

Participation in the NSLP as reported on the Student Questionnaires was about 10 percent higher in NSLP schools without the SMP than in those with the SMP. This difference, about the same as recorded on the Administrative Questionnaire, was almost entirely attributable to a difference in the percentage of students bringing bag lunches to school between these two types of schools: in NSLP-with-SMP schools bag lunches accounted for 21 percent of all lunches on the day of the survey, compared to 11 percent in NSLP-without-SMP schools. In NSLP-with-SMP schools 89 percent of students eligible for free milk and in attendance reported eating the Type A lunch on the day of the survey, compared to 50 percent of children not eligible for free milk who ate the Type A lunch in these schools.

In schools not participating in the NSLP, 5 percent of students in attendance on the day of the survey reported eating only a complete school lunch 8/ that day, 10 percent reported eating only a la carte items, 52 percent reported eating only a bag lunch, 5 percent reported eating a combination of a la carte items and bag lunch items, 23 percent reported eating lunch away from school, and 5 percent reported eating no lunch. As was seen in NSLP schools, the percentage of students eating bag lunches declined as the grade level of the students increased, while the percentages of students who reported eating a la carte lunches and those eating no lunch increased from the elementary to the secondary level. Un-

8/ Some non-NSLP schools do offer a complete school lunch, but it is unlikely that 5 percent of total non-NSLP enrollment ate this type of lunch. The tendency, noted in the previous footnote, for students to mistakenly report this type of lunch probably accounts for much of this 5 percent figure.

like NSLP schools, where the number of students eating lunch at home remained a steady 6 percent at both the elementary and secondary levels, in non-NSLP schools the number of students eating lunch at home decreased sharply from 26 percent at the elementary level to 8 percent at the secondary level.

The percentage of students eating lunch at a restaurant or carry-out was 2 percent in non-NSLP schools and 1 percent in NSLP schools. Students eating at some "other" place outside the school grounds constituted 3 percent of all students in non-NSLP schools and 1 percent in NSLP schools. For many of these students in non-NSLP schools some "other" place for lunch was some other school which participated in the NSLP.

C. Which Students Utilize the SMP

To determine which students, in terms of type of lunch eaten, utilize the SMP, an analysis was made of responses to the Student Questionnaire questions on type of lunch eaten and amount of milk consumed at school. This method of aligning SMP milk with type of lunch eaten is considerably more practicable than is a physical count of SMP half-pints dispensed by type of lunch-taker receiving them. It is also, however, more prone to error due to student overreporting of milk consumption and inability to segregate those half-pints received under the SBP or brought from home from those received through the SMP. Assuming, however, that overreporting of milk consumption is relatively uniform across all types of lunch-takers and adjusting consumption figures for SBP half-pints, the following estimate can be made for the distribution of SMP half-pints by type of lunch-taker receiving them:

30% of SMP milk is consumed by students who eat a Type A lunch
12% of SMP milk is consumed by students who eat a la carte lunches
43% of SMP milk is consumed by students who eat bag lunches
9% of SMP milk is consumed by students who eat lunch away from school
6% of SMP milk is consumed by students who report eating no lunch

A significant difference in this distribution is evident between elementary and secondary schools, reflecting primarily the larger percentage of elementary students who eat bag lunches and the larger percentage of secondary students who eat a la carte lunches or report eating no lunch. The distributions of SMP milk by type of lunch-taker receiving this milk for elementary and secondary schools are as follows:

Elementary	Secondary	
31%	27%	. . . . of SMP milk is consumed by students who eat Type A lunches
3%	22%	. . . . of SMP milk is consumed by students who eat a la carte lunches
56%	30%	. . . . of SMP milk is consumed by students who eat bag lunches
9%	9%	. . . . of SMP milk is consumed by students who eat lunch away from school
1%	12%	. . . . of SMP milk is consumed by students who report eating no lunch

These figures do not differentiate between SMP milk served at lunchtime and that served between meals. Thus, a significant portion of the 30 percent of SMP milk consumed by students who eat the Type A lunch is probably served at nonmealtimes. Also, since no adjustment was made to account for milk brought from home and consumed at school, these distributions may overstate the proportion of SMP milk consumed by students who eat bag lunches (who would most likely account for the major portion of children bringing milk to school). However, since only 11 percent of students in SMP schools reported ever bringing milk from home to school, any such overstatement should be slight.

D. Student Preferences on Times of Milk Service

Lunchtime was by far the time of day most frequently cited by students as desirable for milk service at school. Seventy-four percent of all students expressed a desire for lunchtime milk service. "First thing in the morning" was the time of day next most frequently cited as desirable for milk service: 27 percent of all students expressed a desire for milk service at this time. Midmorning, midafternoon, and end of school were all about equally popular for milk service, each being cited by roughly 20 percent of students. Sixteen percent of students over all schools responded "don't care" when asked for their preference on times of milk service.

The most significant difference between schools with the SMP and those without the program, in terms of preference as to times of milk service, was in the percentage of students without a preference: in SMP schools 15 percent of students responded "don't care" compared to 21 percent of students with this response in non-SMP schools. A slightly greater percentage of students in non-SMP schools expressed a preference for milk service at school "first thing in the morning," and a smaller percentage expressed a preference for lunchtime milk service than was found in SMP schools.

Secondary students were more likely than elementary students to express no preference as to times of milk service. They were also less likely than elementary students to express a preference for midmorning, lunchtime, or midafternoon milk service. Regionally, there were very few differences in student preferences as to times of milk service.

For all schools nationwide, 49 percent of students approved of the times of day milk was offered in their schools, 34 percent disapproved, and 17 percent responded "don't care when milk is served." Students in schools with the SMP were more likely to approve of the times of milk service in their schools than were students in schools without the program: 51 percent of students in SMP schools approved of the times of milk service in their schools compared to 43 percent in schools without the SMP. Students at the elementary level were more likely than those at the secondary level to approve of the times of milk service in their schools, while secondary students were more likely to respond "don't care" to the approval-disapproval question.

The pattern of student preferences on times of milk service coincides closely with the pattern of times at which milk is actually offered: e.g., elementary students expressed a stronger preference for midmorning and midafternoon milk service than did secondary students and milk service at these times is considerably more common among elementary than among secondary schools; secondary students expressed a slightly stronger preference for milk service "first thing in the morning" and milk service at this time is, in fact, about twice as common at the secondary level as at the elementary level. Thus, either schools are currently doing a good job of meeting student preferences on times of milk service or students simply indicated preferences for milk service at the times they were accustomed to receive milk. One exception to this is milk service at school "first thing in the morning" which was the second most preferred time of service among students yet was the time at which the fewest number of schools actually served milk. Also of note is the fact that the proportion of students who approved of the times of milk service in their schools was larger in SMP schools than in schools without the milk program: in fact, milk is served more frequently in SMP schools than in non-SMP schools.

Table 4 Student Consumption of Milk by Grade Level, by Flavored Milk Availability, and by Soft Drink Availability: Mean Number of Cartons or Glasses of Milk Reported Consumed at School and Away From School in 24-Hour Period

	Mean Number of Cartons or Glasses of Milk Consumed by Students In								
	All Schools			SMP Schools			Schools Without SMP		
	At School	Away From School	Total	At School	Away From School	Total	At School	Away From School	Total
Students in Grades:									
Pre-K - 3	1.01	1.84	2.85	1.05	1.84	2.88	0.87	1.83	2.69
4 - 6	0.96	2.23	3.19	1.02	2.22	3.24	0.74	2.25	2.99
7 - 9	0.93	2.18	3.10	1.00	2.20	3.20	0.66	2.09	2.76
10 - 12	0.84	2.09	2.94	0.96	2.05	3.01	0.63	2.18	2.81
Elementary Subtotal	0.99	2.01	3.00	1.04	2.00	3.04	0.81	2.02	2.83
Secondary Subtotal	0.89	2.14	3.03	0.98	2.14	3.13	0.64	2.14	2.78
Total	0.95	2.06	3.01	1.02	2.06	3.07	0.72	2.08	2.81
Students in Schools Making Flavored Milk Available	1.04	2.09	3.13	1.05	2.12	3.17	0.95	1.92	2.87
Students in Schools Without Flavored Milk	0.89	2.04	2.93	1.00	2.02	3.01	0.49	2.24	2.75
Students in Schools Making Soft Drinks Available 1/	-	-	-	0.97	2.05	3.02	-	-	-
Students in Schools Without Soft Drinks 1/	-	-	-	1.03	2.06	3.09	-	-	-

1/ Soft drink availability determined only in SMP schools.

Table 5 Student Consumption of Milk by Grade Level and by Sex of Student in Specified Types of Schools: Mean Number of Cartons or Glasses of Milk Reported Consumed At School and Away From School in 24-Hour Period

	Mean Number of Cartons or Glasses of Milk Consumed by Students In								
	SMP With NSLP Schools			SMP Without NSLP Schools			NSLP Without SMP Schools		
	At School	Away From School	Total	At School	Away From School	Total	At School	Away From School	Total
Students in Grades:									
Pre-K - 3	1.08	1.79	2.86	0.72	2.38	3.10	1.04	1.72	2.77
4 - 6	1.06	2.15	3.21	0.68	2.80	3.48	1.02	1.95	2.97
7 - 9	1.02	2.17	3.19	0.72	2.66	3.38	0.84	1.98	2.82
10 - 12	0.96	2.05	3.00	0.96	2.11	3.07	0.76	1.87	2.63
Elementary Subtotal	1.07	1.94	3.01	0.70	2.58	3.28	1.04	1.82	2.86
Secondary Subtotal	1.00	2.12	3.12	0.79	2.51	3.29	0.80	1.92	2.72
Total	1.04	2.01	3.06	0.72	2.56	3.29	0.93	1.87	2.80
Male Students	1.18	2.23	3.41	0.77	2.77	3.54	1.02	2.06	3.08
Female Students	0.88	1.78	2.66	0.68	2.36	3.04	0.83	1.66	2.49

Table 6 Male vs. Female Consumption of Milk: Mean Number of Cartons or Glasses of Milk Reported Consumed at School and Away From School in 24-Hour Period

	Mean Number of Cartons or Glasses of Milk Consumed by Students In								
	All Schools			SMP Schools			Schools Without SMP		
	At School	Away From School	Total	At School	Away From School	Total	At School	Away From School	Total
Males in Grades:									
Pre-K - 3	1.07	1.97	3.05	1.12	1.99	3.11	0.87	1.89	2.76
4 - 6	1.00	2.36	3.36	1.06	2.37	3.43	0.76	2.30	3.06
7 - 9	1.13	2.44	3.57	1.21	2.44	3.64	0.82	2.43	3.25
10 - 12	1.12	2.48	3.59	1.28	2.43	3.71	0.81	2.56	3.37
Elementary Subtotal	1.04	2.14	3.19	1.10	2.16	3.25	0.83	2.07	2.90
Secondary Subtotal	1.12	2.45	3.58	1.23	2.43	3.67	0.81	2.50	3.32
Total	1.08	2.27	3.35	1.15	2.27	3.42	0.82	2.29	3.11
Females in Grades:									
Pre-K - 3	0.95	1.69	2.63	0.97	1.67	2.64	0.86	1.77	2.62
4 - 6	0.91	2.08	3.00	0.97	2.05	3.02	0.72	2.20	2.91
7 - 9	0.72	1.91	2.62	0.78	1.94	2.72	0.53	1.79	2.32
10 - 12	0.54	1.67	2.22	0.60	1.63	2.23	0.43	1.76	2.19
Elementary Subtotal	0.94	1.86	2.79	0.97	1.83	2.80	0.79	1.96	2.75
Secondary Subtotal	0.65	1.81	2.46	0.71	1.83	2.54	0.48	1.78	2.25
Total	0.81	1.84	2.65	0.87	1.83	2.69	0.63	1.86	2.49

Table 7 Milk Consumption of Students Approved For Free Milk and Students Not Approved In SMP Schools: Mean Number of Cartons or Glasses of Milk Reported Consumed At School and Away From School in 24-Hour Period

	SMP Schools				
		With NSLP			Without
	Total	Subtotal	With SBP	Without SBP	NSLP
Percentage of Enrollment Approved for Free Milk 1/	19.2%	20.6%	43.7%	16.5%	2.8%
Percentage of Enrollment Not Approved for Free Milk	80.8%	79.4%	56.3%	83.5%	97.2%
	- mean number of cartons or glasses reported consumed -				
Consumption At School By:					
Students Approved For Free Milk	1.34	1.34	1.52	1.25	1.26
Students Not Approved	0.94	0.96	1.01	0.96	0.71
All Students	1.02	1.04	1.23	1.01	0.72
Consumption Away From School By:					
Students Approved For Free Milk	1.67	1.66	1.47	1.75	2.40
Students Not Approved	2.15	2.11	1.69	2.16	2.57
All Students	2.06	2.01	1.59	2.09	2.56
Total Daily Consumption By:					
Students Approved For Free Milk	3.01	3.00	2.99	3.01	3.66
Students Not Approved	3.09	3.07	2.70	3.12	3.27
All Students	3.07	3.06	2.82	3.10	3.29

1/ These data on percentage of enrollment approved for free milk are taken from the student questionnaires and differ very slightly from the same data taken from the administrative questionnaires. The difference is within the bounds of sampling variability.

Table 8 Percentage of Students Reporting Having Consumed Specified Number of Cartons or Glasses of Milk At School in 24-Hour Period

	Number of Half-Pints of Milk Consumed at School						
	Zero	One	Two	Three	Four	More Than Four	Total
	- Percentage of Students -						
All Schools							
Elementary Students	20.3	62.5	15.0	1.5	0.2	0.2	100.0
Secondary Students	39.3	40.4	14.7	3.8	1.0	0.8	100.0
Total Students	28.5	53.1	14.9	2.5	0.5	0.5	100.0
SMP Schools							
Elementary Students	17.3	64.2	16.4	1.7	0.2	0.1	100.0
Secondary Students	34.0	42.8	16.9	4.3	1.1	0.9	100.0
Total Students	24.1	55.5	16.6	2.8	0.5	0.5	100.0
SMP Schools-Students Approved for Free Milk							
Elementary Students	9.8	50.5	36.5	2.8	0.3	0.0	100.0
Secondary Students	16.9	40.0	35.9	6.1	0.9	0.2	100.0
Total Students	12.0	47.3	36.3	3.8	0.5	0.1	100.0
SMP Schools-Students Not Approved for Free Milk							
Elementary Students	19.5	68.2	10.6	1.4	0.2	0.1	100.0
Secondary Students	36.9	43.3	13.7	4.0	1.1	1.1	100.0
Total Students	27.0	57.4	11.9	2.5	0.6	0.5	100.0
Schools With Non-SMP A La Carte Milk Service							
Elementary Students	24.6	64.7	9.3	0.8	0.3	0.3	100.0
Secondary Students	52.9	34.5	9.0	2.3	0.7	0.6	100.0
Total Students	41.1	47.1	9.1	1.7	0.5	0.5	100.0
Schools Without A La Carte Milk Service							
Elementary Students	51.6	38.1	7.9	0.6	0.3	1.5	100.0
Secondary Students	59.4	29.0	8.1	1.8	1.8	0.0	100.0
Total Students	53.5	35.9	8.0	0.9	0.6	1.2	100.0

Table 9 Percentage of Students Reporting Having Consumed Specified Number of Cartons or Glasses of Milk Away From School in 24-Hour Period

	Number of Half-Pints of Milk Consumed Away From School						
	Zero	One	Two	Three	Four	More Than Four	Total
	- Percentage of Students -						
All Schools							
Elementary Students	15.7	24.6	26.5	17.4	8.4	7.4	100.0
Secondary Students	20.6	18.1	21.6	18.1	9.5	12.1	100.0
Total Students	17.8	21.8	24.4	17.7	8.9	9.4	100.0
SMP Schools							
Elementary Students	15.1	24.9	27.2	17.5	8.2	7.1	100.0
Secondary Students	20.6	17.7	21.8	18.4	9.6	11.9	100.0
Total Students	17.3	22.0	25.0	17.9	8.8	9.1	100.0
SMP Schools-Students Approved for Free Milk							
Elementary Students	24.3	30.3	20.8	11.9	7.9	4.7	100.0
Secondary Students	28.7	20.0	19.7	17.3	6.7	7.6	100.0
Total Students	25.7	27.1	20.5	13.5	7.6	5.6	100.0
SMP Schools-Students Not Approved for Free Milk							
Elementary Students	12.4	23.4	29.0	19.1	8.3	7.8	100.0
Secondary Students	19.2	17.4	22.2	18.6	10.1	12.6	100.0
Total Students	15.4	20.8	26.0	18.9	9.0	9.9	100.0
Schools With Non-SMP A La Carte Milk Service							
Elementary Students	17.4	23.5	25.1	18.1	8.5	7.4	100.0
Secondary Students	20.2	19.2	21.2	17.6	9.3	12.5	100.0
Total Students	19.0	21.0	22.8	17.8	9.0	10.4	100.0
Schools Without A La Carte Milk Service							
Elementary Students	20.4	21.8	21.1	14.1	10.9	11.8	100.0
Secondary Students	23.9	18.0	18.7	15.2	10.6	13.7	100.0
Total Students	21.3	20.8	20.5	14.3	10.8	12.2	100.0

Table 10 Milk Consumption at School by Students Eating Specified Types of Lunches: Mean Number of Cartons or Glasses of Milk Reported Consumed at School in 24-Hour Period

Type of Lunch Eaten:	Mean Number of Cartons or Glasses of Milk Consumed at School By Students in						
	Schools With NSLP					Schools Without NSLP	
		With SMP					
	Total	All Students	Students Approved For Free Milk	Students Not Approved For Free Milk	Without SMP	Total	With SMP
Complete School Lunch (Type A in NSLP Schools)	1.23	1.25	1.42	1.18	1.11	1.22	1.47
A La Carte Items Bought At School	0.80	0.86	0.66	0.87	0.52	0.70	0.80
Bag Lunch Brought From Home	0.80	0.80	0.77	0.81	0.78	0.63	0.79
Combination of Above	1.06	1.09	1.08	1.09	0.86	0.70	0.64
Subtotal of Students Eating Lunch At School	1.10	1.12	1.38	1.04	1.02	0.68	0.82
Lunch At Home	0.44	0.47	0.37	0.47	0.23	0.23	0.33
Lunch At a Restaurant	0.49	0.52	0.46	0.53	0.27	0.44	0.44
Lunch At Some Other Place	0.59	0.63	0.73	0.62	0.21	0.40	0.33
Subtotal of Students Eating Lunch Away From School	0.48	0.50	0.41	0.51	0.23	0.27	0.33
No Lunch	0.55	0.60	0.70	0.59	0.29	0.25	0.59
Total	1.03	1.04	1.34	0.96	0.93	0.57	0.72

Table 11 Total Daily Milk Consumption by Students Eating Specified Types of Lunches: Mean Number of Cartons or Glasses of Milk Reported Consumed at School and Away from School in 24-Hour Period

Type of Lunch Eaten:	Mean Number of Cartons or Glasses of Milk Consumed by Students In						
	Schools With NSLP					Schools Without NSLP	
		With SMP					
	Total	All Students	Students Approved For Free Milk	Students Not Approved For Free Milk	Without SMP	Total	With SMP
Complete School Lunch (Type A in NSLP Schools)	3.12	3.17	3.07	3.22	2.86	3.40	3.77
A La Carte Items Bought At School	3.02	3.07	2.34	3.10	2.79	3.03	3.32
Bag Lunch Brought From Home	3.05	3.02	2.62	3.04	3.00	3.10	3.37
Combination of Above	3.63	3.66	2.98	3.69	3.40	3.30	3.19
Subtotal of Students Eating Lunch At School	3.11	3.14	3.04	3.17	2.88	3.12	3.38
Lunch At Home	2.43	2.42	1.84	2.47	2.50	2.78	2.93
Lunch At a Restaurant	2.55	2.58	1.93	2.61	2.33	2.47	3.04
Lunch At Some Other Place	2.89	3.00	2.54	3.02	1.92	2.75	2.57
Subtotal of Students Eating Lunch Away From School	2.54	2.55	1.90	2.60	2.41	2.75	2.91
No Lunch	2.24	2.32	2.44	2.31	1.86	2.20	3.14
Total	3.02	3.06	3.00	3.07	2.80	3.00	3.29

Table 12 Percentage of Students Who Reported Eating Specified Types of Lunches in Specified Types of Schools

Percentage of Students Who Reported Eating:	Schools With NSLP					Schools Without NSLP	
		With SMP					
	Total	All Students	Students Approved For Free Milk	Students Not Approved For Free Milk	Without SMP	Total	With SMP
Complete School Lunch (Type A in NSLP Schools)	59.4	57.8	89.0	49.7	68.2	4.9	4.1
A La Carte Items Bought At School	5.8	5.6	0.9	6.9	6.8	10.1	6.8
Bag Lunch Brought From Home	19.3	20.7	4.5	24.9	11.4	52.3	63.6
Combination of Above	2.7	2.9	0.7	3.4	1.8	5.1	4.6
Subtotal of Students Eating Lunch At School	87.2	87.0	95.1	84.9	88.4	72.4	79.1
Lunch At Home	5.7	5.9	2.1	6.9	4.4	17.3	16.0
Lunch At a Restaurant	1.0	1.0	0.2	1.2	0.8	2.2	1.2
Lunch At Some Other Place	1.0	1.1	0.2	1.3	0.7	3.3	1.4
Subtotal of Students Eating Lunch Away From School	7.8	8.1	2.5	9.5	5.9	22.9	18.7
No Lunch	5.0	4.9	2.4	5.6	5.7	4.7	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 13 Percentage of Elementary Students (Grades Prekindergarten-6) Who Reported Eating Specified Types of Lunches in Specified Types of Schools

Percentage of Elementary Students Who Reported Eating:	Schools With NSLP					Schools Without NSLP	
		With SMP					
	Total	All Students	Students Approved For Free Milk	Students Not Approved For Free Milk	Without SMP	Total	With SMP
Complete School Lunch (Type A in NSLP Schools)	68.6	67.0	92.6	58.6	78.6	2.2	2.1
A La Carte Items Bought At School	0.9	0.9	0.2	1.1	1.0	2.1	2.9
Bag Lunch Brought From Home	21.6	23.0	4.7	29.0	13.1	64.7	69.7
Combination of Above	2.2	2.3	0.2	2.9	1.9	1.6	2.9
Subtotal of Students Eating Lunch At School	93.3	93.2	97.8	91.6	94.6	70.5	77.6
Lunch At Home	5.6	5.9	1.7	7.3	3.6	25.9	19.7
Lunch At a Restaurant	0.1	0.1	0.2	0.1	0.4	1.0	1.0
Lunch At Some Other Place	0.3	0.3	0.1	0.4	0.1	2.1	1.1
Subtotal of Students Eating Lunch Away From School	6.1	6.3	1.9	7.8	4.0	29.0	21.8
No Lunch	0.6	0.5	0.3	0.6	1.4	0.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 14 Percentage Of Secondary Students (Grades 7-12) Who Reported Eating Specified Types of Lunches In Specified Types of Schools

Percentage of Secondary Students Who Reported Eating:	Schools With NSLP					Schools Without NSLP	
		With SMP					
	Total	All Students	Students Approved For Free Milk	Students Not Approved For Free Milk	Without SMP	Total	With SMP
Complete School Lunch (Type A in NSLP Schools)	46.7	45.1	80.8	38.7	55.1	7.8	8.9
A La Carte Items Bought At School	12.5	12.2	2.5	14.0	14.2	18.6	16.3
Bag Lunch Brought From Home	16.2	17.4	4.1	19.8	9.4	39.1	48.4
Combination of Above	3.3	3.7	1.5	4.0	1.8	8.8	9.3
Subtotal of Students Eating Lunch At School	78.7	78.4	89.0	76.5	80.6	74.3	82.9
Lunch At Home	5.9	5.9	3.1	6.4	5.5	8.3	6.8
Lunch At a Restaurant	2.2	2.4	0.4	2.8	1.3	3.6	1.7
Lunch At Some Other Place	2.1	2.2	0.5	2.5	1.5	4.6	2.3
Subtotal of Students Eating Lunch Away From School	10.3	10.6	4.0	11.8	8.3	16.6	10.9
No Lunch	11.0	11.0	7.0	11.7	11.1	9.1	6.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 15 Percentage of Students in SMP Schools, in Non-SMP Schools, and in All Schools Who Expressed A Preference for Milk Service At Specified Times; Percentage of Students Who Approved and Disapproved of Times Milk Was Served In Their Schools

	Percentage of Students Who Preferred Milk Service At School						Percentage of Students Who		
	First Thing In The Morning	Mid-Morning	Lunchtime	Mid-Afternoon	End Of School	Don't Care	Approved Of Times Served	Disapproved Of Times Served	Expressed No Opinion
SMP Schools									
Elementary Students	25	21	79	23	20	12	55	32	13
Secondary Students	28	20	71	15	21	20	43	36	20
All Students	26	21	76	20	20	15	51	33	16
Schools Without SMP									
Elementary Students	28	21	70	20	24	15	42	46	12
Secondary Students	28	16	63	12	20	25	44	29	27
All Students	28	19	67	16	22	21	43	37	20
All Schools									
Elementary Students	26	21	77	22	21	13	53	34	13
Secondary Students	28	19	69	14	20	21	44	34	22
All Students	27	20	74	19	21	16	49	34	17

Table 16 Percentage of Students Who Never Bring Milk to School in Specified Types of Schools

	Percentage of Students Who Never Bring Milk to School In				
			Schools With SMP		
	All Schools	Schools Without SMP	All Students	Students Approved For Free Milk	Students Not Approved For Free Milk
Elementary Students	82	81	82	97	78
Secondary Students	98	97	98	98	98
All Students	89	89	89	97	87

VII. Milk Waste

A description of the methodology utilized in the milk waste measurement part of the study may be found in Section III of this report. Four points on this methodology should be noted here:

1. Milk waste was measured only in sample schools which participated in at least one of the USDA child nutrition programs. The applicability of the findings presented here to non-USDA program schools is unknown. In addition, milk waste was measured in USDA program schools for all milk served and not, for instance, for milk served under the NSLP versus milk served under the SMP, or for flavored half-pints versus unflavored half-pints. Inferences, therefore, are drawn on the basis of school groupings--e.g., NSLP-with-SMP schools versus NSLP-only schools, schools with flavored milk versus schools not offering flavored milk.

2. Milk waste was measured only during lunch periods in these schools. No data were collected on milk waste at service periods other than lunchtime. Since survey data indicate, however, that about 85 percent of all milk served in schools is served at lunchtime, the findings presented here would not change markedly if milk waste were measured across all milk service periods.

3. Milk from unopened cartons was considered wasted milk. Some schools (where permitted by local health laws) collect and recycle unopened cartons of milk. Since collection of milk cartons for the milk waste measurement took place almost exclusively at the waste disposal receptacles, however, little if any milk which would have been recycled entered the "unopened carton" count.

4. Findings may be biased by the "Hawthorne Effect." (The presence of an observer alters the phenomenon being observed.) Although the method used to collect milk cartons in this survey minimized the exposure of the enumerators to the students, the generally quick detection by students of unusual activity in the lunchroom probably effected a slight downward bias in the measure of milk waste obtained here. While the levels of milk waste reported here are generally on the same order as those reported in previous, less extensive studies, they are best used in a relative, not absolute, manner: i.e., in making comparisons among levels of waste in differing situations.

Milk waste over all USDA program schools averaged 11.5 percent. Almost 75 percent of all half-pints served were completely consumed, 23 percent were partially consumed, and just over 2 percent were brought to the waste disposal area unopened. An average of 3.2 ounces of milk remained in each of the partially consumed 8-ounce cartons. About 40 percent of these USDA program schools had less than 5 percent milk waste, and over 17 percent of these schools had 20 percent or more milk waste. Milk waste in elementary schools averaged 14.8 percent and in secondary schools 6.1 percent.

The Special Milk Program does not appear to contribute significantly toward milk waste. In schools with the SMP and without the NSLP, milk waste averaged only 3.5 percent. Moreover, milk waste measured the same (11.9 percent) in NSLP schools with the SMP as in NSLP schools without the SMP.

Availability of flavored milk was associated with significantly reduced levels of milk waste. For all USDA program schools offering flavored milk at lunchtime, milk waste averaged 8.0 percent, compared to 14.0 percent waste in schools not offering flavored milk. In schools offering flavored milk, flavored milk accounted for 74 percent of all milk served at lunch-time. Twenty-two percent of all schools not offering flavored milk had milk waste in excess of 20 percent while only 11 percent of schools offering flavored milk had this level of waste. The lower level of milk waste in schools with flavored milk was due to both a higher percentage of completely consumed half-pints (79 percent in schools with flavored milk versus 71 percent in schools not offering flavored milk) and a 24 percent lower amount of milk waste per partially consumed container (2.8 ounces per partially consumed half-pint in schools with flavored milk versus 3.4 ounces in schools not offering flavored milk). The lower level of milk waste associated with service of flavored milk was seen in all USDA program combinations examined (NSLP with SMP, NSLP without SMP, and SMP without NSLP) and at both the elementary and secondary levels. It is all the more significant in view of the fact that about 5 percent more milk per student enrolled was served at lunchtime in schools offering flavored milk than in schools not offering it.

Milk waste was also examined for its relationship to the number of students eligible to receive free milk. A direct relationship was seen to exist; that is, as the percentage of students eligible to receive free milk increased, the percentage of milk waste increased. Because this finding relies on ecological data, it should not be construed as definitive evidence that free milk causes increased milk waste or that children who receive free milk waste more milk than children who do not receive free milk.

Table 17 Milk Waste at Lunchtime in USDA Program Schools on the Day of the Survey

	All USDA Program Schools	All SMP Schools	All NSLP Schools	SMP With NSLP Schools	SMP Without NSLP Schools	NSLP Without SMP Schools
Number of Schools 1/	91,597	79,408	83,530	71,341	8,067	12,189
Enrollment (Millions)	46.89	40.57	44.19	37.87	2.71	6.32
Mean Enrollment	512	511	529	531	336	519
Number of Half-Pints Served at Lunch (Millions)	31.11	26.86	29.78	25.53	1.33	4.25
- Percent Completely Consumed	74.8%	74.4%	74.2%	73.7%	88.0%	77.0%
- Percent Partially Consumed	22.8%	23.2%	23.3%	23.8%	11.7%	20.2%
- Percent Unopened	2.4%	2.4%	2.5%	2.5%	0.4%	2.8%
Mean Number of Ounces Left in Partially Consumed Half-Pints	3.19	3.13	3.21	3.16	2.18	3.58
Percent of Milk Left Unconsumed 2/	11.5%	11.5%	11.9%	11.9%	3.5%	11.9%

1/ Excludes schools not operating at lunchtime on day of the survey.

2/ Ounces of milk left in partially consumed and unopened containers divided by total ounces served.

Table 18 Distribution of USDA Program Schools by Percentage of Milk Left Unconsumed

	—Percentage of Milk Left Unconsumed—							
	Less Than 2.0%	2.0 - 4.9%	5.0 - 7.9%	8.0 - 10.9%	11.0 - 13.9%	14.0 - 19.9%	20.0 - 29.9%	30.0% or More
All USDA Program Schools								
Number of Schools	19,294	17,535	10,978	11,223	7,156	9,448	9,001	6,962
- Percentage of Schools	21%	19%	12%	12%	8%	10%	10%	8%
Mean Attendance	318	524	522	520	488	396	468	440
Per Capita Half-Pints 1/	0.79	0.80	0.83	0.91	1.01	0.92	0.92	1.18
USDA Program Schools Serving Flavored Milk								
Number of Schools	7,930	9,062	4,945	6,092	1,670	2,855	2,439	1,447
- Percentage of Schools	22%	25%	14%	17%	5%	8%	7%	4%
Mean Attendance	419	518	603	496	601	387	288	588
Per Capita Half-Pints 1/	0.73	0.83	0.83	1.0[illegible]	0.92	0.90	1.03	1.47
USDA Program Schools Not Serving Flavored Milk								
Number of Schools	11,364	8,473	6,033	5,130	5,485	6,593	6,562	5,515
- Percentage of Schools	21%	15%	11%	9%	10%	12%	12%	10%
Mean Attendance	247	530	455	549	453	400	535	401
Per Capita Half-Pints 1/	0.87	0.77	0.82	0.79	1.05	0.93	0.89	1.07

1/ Number of half-pints served at lunchtime divided by number of students in attendance.

Table 19 Milk Waste in Schools Offering Flavored Milk and in Schools not Offering Flavored Milk

	Schools Offering Flavored Milk				Schools Not Offering Flavored Milk			
	All USDA Program Schools	SMP With NSLP Schools	SMP Without NSLP Schools	NSLP Without SMP Schools	All USDA Program Schools	SMP With NSLP Schools	SMP Without NSLP Schools	NSLP Without SMP Schools
Number of Schools	34,752	26,524	3,321	4,907	56,845	44,817	4,745	7,282
Enrollment (Millions)	18.91	15.23	0.92	2.76	27.98	22.63	1.79	3.56
Mean Enrollment	544	574	277	562	492	504	376	490
Number of Half-Pints Served at Lunch (Millions)	12.89	10.56	0.53	1.80	18.22	14.97	0.80	2.46
- Percent Flavored Milk of Total Served at Lunch	74%	74%	76%	72%	-	-	-	-
Percent of Half-Pints Completely Consumed	79.4%	78.4%	91.4%	82.6%	71.4%	70.4%	85.7%	72.9%
Percent of Half-Pints Partially Consumed	19.1%	20.0%	8.4%	16.8%	25.4%	26.4%	13.9%	22.7%
Percent of Half-Pints Unopened	1.4%	1.6%	0.3%	0.6%	3.2%	3.1%	0.4%	4.4%
Mean Number of Ounces Left in Partially Consumed Half-Pints	2.76	2.75	1.95	3.00	3.41	3.38	2.28	3.89
Percent of Milk Left Unconsumed 1/	8.0%	8.5%	2.3%	6.9%	14.0%	14.3%	4.4%	15.5%

1/ Ounces of milk left in partially consumed and unopened containers divided by total ounces served.

Table 20 Milk Waste in SMP Schools by Percentage of Enrollment With Approved Applications on File to Receive Free SMP Milk

	SMP Schools--Percent of Enrollment Approved for Free Milk				
	Less Than 10%	10% - 24.9%	25% - 49.9%	50% - 74.9%	75% or More
Number of Schools	37,507	21,186	9,635	5,502	5,578
Mean Enrollment	528	456	555	532	507
Number of Half-Pints Served at Lunch/Attendance	0.69	0.72	0.80	0.95	1.03
Percent of Half-Pints Completely Consumed	76%	77%	73%	70%	66%
Percent of Half-Pints Partially Consumed	22%	21%	24%	27%	28%
Percent of Half-Pints Left Unopened	2%	2%	3%	3%	6%
Percent of Milk Left Unconsumed 1/	9.1%	11.4%	13.5%	13.6%	17.6%

1/ Ounces of milk left in partially consumed and unopened containers divided by total ounces served.

VIII. General Program Data

Table 21 presents the general program data. Because of the sampling methodology, the total school count (105,505) is the same for January for each of the 4 years listed (1972-1975). Office of Education, DHEW, data show that the actual number of schools in the United States declined slightly over this period.

Of the total school count, 88 percent, enrolling 90 percent of the U. S. school population, participated in at least one of the USDA child nutrition programs in January 1975; 8 percent of these schools, with 8 percent of total enrollment, did not participate in a USDA program but did make food and/or milk available to students. Only 4 percent of all schools, with 2 percent of total enrollment, had no food or milk service in January 1975. A slightly higher percentage of elementary schools than of secondary schools participated in a USDA program in January 1975 (89 percent versus 86 percent), but only 1 percent of secondary enrollment, compared to 3 percent of elementary, did not have access to food or milk at school.

The survey data show that over the 1972-1975 period there was a slight increase both in the number of schools with a USDA program and in the number of schools with food and/or milk service outside USDA auspices.

Just under 2 percent of all schools operated on a split-session basis for all or most grades taught in January 1974 and in January 1975.

Table 21 General Program Data

	All Schools 1/	Schools With One Or More USDA Programs	Schools With No USDA Programs But With Other Food or Milk Service	Schools With No Food Or Milk Service
January 1975				
Number of Schools	105,505	92,622	8,167	4,716
Enrollment (Millions)	52.57	47.14	4.32	1.11
Mean Enrollment	498	509	529	235
Avg. Daily Attendance (ADA) (millions)	48.57	43.44	4.09	1.04
Attendance Factor (ADA/ Enrollment)	92.4%	92.1%	94.7%	93.6%
Number of Split-Session Schools	1876	1358	96	422
- Mean Enrollment in Split-Session Schools	626	800	130	181
January 1974				
Number of Schools	105,505	91,919	8,074	5,512
Enrollment (Millions)	52.75	47.23	4.08	1.43
January 1973				
Number of Schools	105,505	92,071	7,814	5,619
January 1972				
Number of Schools	105,505	91,378	7,681	6,446

1/ Due to sampling methodology total school count identical for all four years. Office of Education, DHEW, data show number of schools declined slightly over this period.

IX. SMP Operations

Tables 22 through 32 present the survey data on operations of the SMP in January 1975 and on the day of the survey. Data were also collected on January 1974 operations of the SMP. Except where noted in the following text, these 1974 data reveal no significant operational changes from 1974 to 1975; they are therefore not presented in tabular format in this report.

Survey data indicate 79,800 schools in the 48 coterminous States and the District of Columbia participated in the SMP in January 1975. This was down from 81,700 schools participating in the program the same month the previous year. This decrease was the result of 4,300 schools dropping the program during this period (see Section IV for reasons) and 2,400 schools adding it.

The number of half-pints served through the program measured 11.4 million on an average daily basis in January 1975, up from 10.7 million in January 1974, according to survey data. About 2.4 million average daily half-pints or 20.9 percent of the total served through the program in January 1975 were served free. (Actual program data show 19.2 percent of all SMP milk was served free in the last half of fiscal 1975.) Over 8.2 million students in SMP schools had approved applications on file to receive free milk in January 1975. Approximately 29 percent of these students actually received free milk through the SMP on a given day during this month, roughly the same percentage as that of students enrolled and not approved for free milk who actually bought SMP milk on a given day. Average daily half-pints served through the SMP measured 30.4 percent of average daily attendance in SMP schools in January 1975.

In schools with the SMP, 36 percent of all milk on the day of the survey was served through the milk program. Of all milk served in these schools (including milk served through the NSLP and SBP), 4 percent was served at breakfast, 84 percent was served at lunchtime, and 12 percent was served at nonmealtimes. Of milk served through the SMP in these schools, 2 percent was served at breakfast, 66 percent was served at lunchtime, and 32 percent was served at nonmealtimes.

The following summarizes the survey data on specific areas of importance in the operation of the Special Milk Program.

Cost of Milk to the School and Charge for Milk to the Student

The average cost nationwide to an SMP school for a half-pint of milk (all types combined) 9/ in January 1974 was 8.5 cents; the average cost to the student for this milk was 5.8 cents. In January 1975 the average cost to an SMP school for a half-pint of milk was 9.5 cents, an 11 percent increase over January 1974; the average charge to the student for this milk was 6.1 cents in January 1975, a 6 percent increase over January 1974. The difference in cost to the school for milk between elementary and secondary schools was less than 1 percent in January 1975 (9.4 cents-elementary, 9.5 cents-secondary), but secondary SMP schools charged an average of 5 percent more for each half-pint than did elementary SMP schools (6.2 cents versus 5.9 cents). Regionally, there was considerable variation in costs and charges for milk. Schools in the Midwest Region, which includes the country's largest dairy States, had the lowest average cost to the school and lowest average charge to the student for SMP milk. Schools in the Western Region had the highest average cost to the school and highest average charge to the student for SMP milk.

9/ The figures cited here on average cost to the school and average charge to the student for a half-pint of milk in SMP schools are based on those schools which maintained the SMP in both January 1974 and January 1975. These comprise 95 percent of all schools which participated in the SMP in January 1974 and 97 percent of all schools which participated in the SMP in January 1975. The weighting of costs and charges for the different types of milk (whole, skim, etc.) to yield a combined figure was based on the percentage of each type served on the day of the survey. This may inject a slight bias into the resulting averages for January 1974; however, no data were collected on the distribution of milk types in that earlier year, so no estimate as to the direction of this possible bias can be made.

An additional bias may be introduced by the fact that the distribution of milk types served on the day of the survey was determined for all milk served in SMP schools, not just SMP milk. The assumption implicit here is that the distribution of milk types for SMP milk conforms to the distribution for all milk. In view of the fact that whole white milk constitutes more than twice as much of total milk over all SMP schools as all other milk types combined and is the only type of milk served in 57 percent of SMP schools, any bias here should be slight.

In January 1975, 12 percent of SMP schools nationwide charged students less than 5 cents for a half-pint of whole white milk, 42 percent charged exactly 5 cents, 32 percent charged 6 or 7 cents, 9 percent charged 8 or 9 cents, and 6 percent charged 10 cents or more. In January 1975, 47 percent of SMP schools charged students more than 5 cents for a half-pint of milk, compared to just under 40 percent of these schools with charges above 5 cents in January 1974. The price charged for a half-pint of milk showed a direct relationship to enrollment size; that is, schools with larger enrollments tended to charge more for a half-pint of milk. This relationship was seen at both the elementary and secondary levels.

Margin on Milk

The margin on milk is the difference between (a) the price the school pays for a half-pint of milk and (b) the price charged by the school to the student for that milk plus the SMP reimbursement plus any other subsidies the school received on milk. This margin is to be used to defray within-school distribution costs on milk (refrigeration, straws, handling, etc.) and, in view of the nonprofit nature of the program, should be no greater than these costs. Prior to fiscal 1975 schools were prohibited by Federal regulation from maintaining a margin on milk in excess of 1.0 cents per half-pint; in exceptional circumstances (to be determined by the States) this margin could go up to but not exceed 1.5 cents. Regulatory controls on this margin were rescinded at the beginning of fiscal 1975.

In January 1974--before standardization of SMP reimbursement rates--SMP reimbursement averaged 3.5 cents per half-pint of milk (not including free milk served under the diminutive Special Assistance Milk Program). The average margin on milk in January 1974 in SMP schools was 0.8 cents. In January 1975 SMP reimbursement for a half-pint of milk was a standard 5.0 cents. The average margin on milk in January 1975--after regulations limiting this margin were rescinded--was 1.6 cents. Survey data show that in January 1974 56 percent of SMP schools had a margin on whole white milk under 1.0 cents, 17 percent had a margin between 1.0 and 1.5 cents, and 27 percent had a margin over 1.5 cents (which suggests lax monitoring of the regulatory limits). In January 1975, 31 percent of SMP schools had a margin on whole white milk under 1.0 cents, 19 percent had a margin between 1.0 and 1.5 cents, and 41 percent had a margin over 1.5 cents. No significant difference was seen between margins in elementary schools and those in secondary schools.

The doubling of the average margin on milk in SMP schools across the time in which regulatory limits on this margin were removed is partially attributable to the inception of free milk service through the SMP. Because free milk served through the SMP is Federally reimbursed at the cost to the school for this milk, exclusive of within-school distribution costs, these distribution costs for free milk must be covered by the margin on milk served to students paying for SMP milk. Also in explanation of the margin doubling, it is likely that the previous limit of 1.0 cents (1.5 cents in exception circumstances) was no longer sufficient in many schools to cover within-school distribution costs of milk served to paying students. Survey data showing almost 10 percent of SMP schools in January 1975 with a margin on milk in excess of 3 cents per half-pint suggest that in some schools the margin on SMP milk in January 1975 exceeded the within-school distribution costs and the nonprofit nature of the program was being violated. Where such violations occured, however, the profits made from SMP milk service were most likely used to offset deficits incurred in other aspects of school foodservice operations.

Types of Milk Served 10/

Whole white milk was by far the most prevalent type of milk served in SMP schools in 1975. On the day of the survey almost 95 percent of SMP schools offered whole white milk to students, and in 57 percent of SMP schools whole white milk was the only type of milk served.

Whole flavored milk was served in over 28 percent of all SMP schools on the day of the survey. In schools serving it, whole flavored milk accounted for 69 percent of all milk served.

Lowfat or nonfat flavored milk was served in just over 10 percent of all SMP schools on the day of the survey. In these schools lowfat or nonfat flavored milk accounted for 72 percent of all milk served. A somewhat greater percentage of SMP schools reported offering flavored milk in January 1975 (45 percent) that actually served flavored milk on the day of the survey (38 percent). This discrepancy is due to the fact that some schools do not make flavored milk available every school day.

10/ The types of milk served in SMP schools were examined without regard to the program through which they were served. It is, practically speaking, almost impossible to distinguish between milk served under the SMP versus that served under the NSLP in a school operating both programs. (Imagine for instance, a student who takes the Type A lunch and puts two milk cartons, one of flavored milk and one of whole white milk, on the lunch tray. Which carton was served via the NSLP and which via the SMP?) The implicit assumption in the discussion in this section is that the distribution of milk types served via the SMP conforms to the distribution of all milk served in SMP schools.

Lowfat milk (unflavored) was served in almost 6 percent of SMP schools on the day of the survey and constituted 42 percent of all milk served in these schools. Lowfat white milk appeared to be offered more commonly instead of and not in conjunction with whole white milk: only 29 percent of those schools serving lowfat white milk on the day of the survey served whole white milk also.

Skim milk (unflavored) was served in just under 4 percent of SMP schools on the day of the survey and constituted only 8 percent of all milk served in schools offering it. Buttermilk was served in less than 1 percent of SMP schools and represented less than 1 percent of all milk served in schools offering it.

Over all SMP schools, whole white milk constituted 68 percent of all milk served on the day of the survey, whole flavored milk constituted 21 percent, lowfat or nonfat flavored milk constituted 9 percent, lowfat white milk constituted under 3 percent, and skim milk (unflavored) and buttermilk both constituted well under 1 percent of all milk served. Differences between elementary and secondary schools in this distribution were very slight, while Regional differences were somewhat more pronounced.

Times of Milk Service

The time of milk service has always been a major focus in discussion of the SMP. Experiments (13) in selected locales at the time of the program's inception demonstrated that increasing the number of milk service periods in conjunction with decreasing the charge to the student for milk effected a significantly greater increase in milk consumption than did simply decreasing the charge to the student for milk without changing the number of service periods. In addition, the nutritional benefits (especially in terms of acceptance) of delivering nutrients over an extended period of time during the day, as opposed to compressing them into one short period (i.e., lunchtime), have generally been considered to argue for making milk available at times in addition to mealtimes.

In January 1975, 45 percent of all SMP schools made milk available only once per day; 96 percent of these schools which offered milk only once per day offered it at lunchtime. Twenty-seven percent of SMP schools offered milk twice per day, 24 percent offered milk three times per day, and 4 percent offered it four or more times per day in January 1975. Elementary schools made milk available at nonmealtimes relatively more often than secondary schools: 44 percent of SMP elementary schools offered milk only at mealtimes (breakfast and lunch) while 66 percent of SMP secondary schools had mealtime milk service only. Nonmealtime milk service was usually offered in the morning rather than the afternoon: 40 percent of SMP schools had a midmorning milk service period while under 29 percent had a midafternoon service period; 17 percent had both midmorning and midafternoon service periods.

A la carte milk sales in SMP schools (i.e., SMP milk) showed a direct relationship to the number of milk service periods--a finding corroborated by the studies mentioned earlier. In schools offering milk only once per day, consumption of a la carte milk measured 26 percent of average daily attendance (ADH-P/ADA) in January 1975. In schools offering milk twice per day the figure increased to 34 percent, and in schools offering milk three times per day the figure increased to 36 percent 11/. Eliminating from consideration those schools which had breakfast or supper milk service, the difference in per capita a la carte milk sales is even more clear-cut: in schools serving milk only at lunchtime per capita sales of SMP milk measured 26 percent; in schools with milk service at lunchtime and at one or more midmeal service periods (but no breakfast, supper, or "other" service), per capita sales measured 39 percent. Increased per capita sales of SMP milk associated with more than one milk service period were evident at both the elementary and secondary levels and in SMP schools with and without the NSLP. In SMP schools without the NSLP, however, per capita milk sales were only slightly higher in schools with more than one versus schools with only one milk service period, and the difference was not statistically significant.

Competitive Beverage Effect

In 65 percent of all SMP schools milk was the only beverage (other than water) available to students. Sixteen percent of SMP schools made soft drinks (carbonated, nonalcoholic beverages) available to students, 53 percent of these schools making soft drinks available at the same time as milk. In almost 26 percent of SMP schools beverages other than soft drinks (e.g., fruit juices or other flavored drinks) were available to students. Soft drink and "other" beverage availability were far more common at the secondary than at the elementary level: 6 percent of SMP elementary schools made soft drinks available to students in constrast to 42 percent of SMP secondary schools; 17 percent of SMP elementary schools made "other" beverages available to students as opposed to 48 percent of SMP secondary schools. SMP schools not participating in the NSLP showed less competitive beverage availability than did those SMP schools which did participate in the lunch program: 83 percent of SMP-only schools versus 63 percent of SMP-with-NSLP schools made milk the only beverage available.

11/ In schools offering milk more than three times per day ADH-P/ADA dropped to 18 percent, but the number of sample schools in this category was too small to allow for any conclusions.

Per capita consumption of SMP milk was significantly lower in schools in which soft drinks were available to students than in schools in which milk was the only beverage available to students. In schools with soft drinks, consumption of SMP milk averaged 0.23 half-pints per student in attendance, compared to 0.33 half-pints per student in schools with milk as the only available beverage. There was no significant difference in per capita consumption of SMP milk between schools offering soft drinks at the same time as milk and those offering soft drinks at times other than when milk was served. Schools which made "other" beverages (but not soft drinks) available to students had a slightly lower level of per capita consumption of SMP milk than did schools in which milk was the only available beverage (0.30 half-pints versus 0.33 half-pints). These differences in per capita consumption of SMP milk associated with soft drink and "other" beverage availability were evident at both the elementary and the secondary levels.

Type of Container and Vending Machine Prevalence

Over 94 percent of SMP schools served milk in half-pint cartons only. Just under 2 percent used 8-ounce glasses, 1 percent used some other container (e.g., one-third quarts), and 3 percent served milk in more than one type of container. Schools using other than half-pint cartons tended to have small enrollments and be private. Nine percent of private schools participating in the SMP served milk in 8-ounce glasses only, compared to under 1 percent of public SMP schools.

Only 1 percent of schools participating in the SMP made milk available through vending machines. Milk vending machines tended to be located in secondary schools with large enrollments. The prevalence of vending machine service recorded here is considerably lower than that recorded in previous surveys [3], [8], which did not differentiate between SMP and other milk service schools in examining vending machine prevalence. It seems likely that vending machines are relatively more prevalent in schools with other than SMP milk service, particularly in view of the fact that 48 percent of SMP schools in January 1975 charged an "odd penny" for milk (four cents, six cents, seven cents, etc.) while only 21 percent of other milk service schools charged the "odd penny."

Table 22 SMP Operations - January 1975

	SMP Schools			
	Total	With NSLP	Without NSLP	With No Lunch Service
Number of Schools	79,804	70,979	8,825	6,595
Enrollment (Millions)	40.64	37.76	2.88	1.86
Mean Enrollment	509	532	327	282
No. Of Students Approved For Free Milk (Millions)	8.23	8.13	0.10	0.06
- Percentage Of Enrollment	20.3%	21.5%	3.5%	3.4%
Avg. Daily Half-Pints (ADH-P) Served Under SMP (Millions)	11.41	9.92	1.48	0.96
- Percentage Free of Total	20.9%	23.0%	6.6%	6.5%
ADH-P/ADA	0.304	0.285	0.544	0.545

Table 23 SMP Operations - Day Of Survey Number And Percentage Of Half-Pints Of Milk Served In Total And Through The SMP At Specified Times Of Day In Specified Types Of Schools

	SMP Schools				
			With NSLP		
	Total	Without NSLP	Subtotal	With SBP	Without SBP
Total Half-Pints Served (Millions)	31.92	1.57	30.36	5.69	24.66
Percent Served at Breakfast	4%	1%	4%	20%	1%
Percent Served at Lunch	84%	85%	84%	72%	87%
Percent Served at Nonmealtimes	12%	14%	12%	8%	12%
SMP Half-Pints/Total Half-Pints	36%	100%	33%	19%	36%
SMP Half-Pints at Breakfast/ Total Half-Pints Served at Breakfast	17%	100%	16%	1%	100%
SMP Half-Pints at Lunch/Total Half-Pints Served at Lunch	28%	100%	25%	15%	27%
SMP Half-Pints at Breakfast/ Total SMP Half-Pints	2%	1%	2%	1%	2%
SMP Half-Pints at Lunch/Total SMP Half-Pints	66%	85%	63%	55%	64%
SMP Half-Pints at Nonmealtimes/ Total SMP Half-Pints	32%	14%	35%	44%	34%

Table 24 SMP Operations
Mean Cost To School And Mean
Charge To Students For One Half-Pint Of Milk In
Schools Operating SMP In Both
January 1974 And January 1975

	All Types Weighted 1/	Whole White Milk	Whole Flavored Milk	Skim Milk (Unflavored)	Lowfat Milk (Unflavored)	Flavored Lowfat or Skim Milk	Butter-Milk	"Other" Milk
	-- In Cents --							
January 1974								
Mean Cost to School	8.51	8.43	8.76	8.11	7.62	8.85	8.29	9.18
Mean Charge to Students	5.75	5.66	5.71	6.03	5.57	6.50	6.33	15.00
January 1975								
Mean Cost to School	9.48	9.30	9.98	9.26	9.02	9.78	11.00	22.50
Mean Charge to Students	6.07	5.97	6.24	5.73	5.72	6.51	8.00	26.00

1/ Types weighted by frequency of service

Table 25 SMP Operations
Frequency Distribution Of Schools Operating SMP
In Both January 1974 and January 1975
By Price Charged To Students For
One Half-Pint Of Whole White Milk

	- Price Charged Students (In Cents) -							
	No Charge	1-4	5	6	7	8 or 9	10	More Than 10
January 1974								
Number of Schools	3,268	11,218	30,299	13,180	7,726	4,226	4,098	282
- Percent of Schools	4.4%	15.1%	40.8%	17.7%	10.4%	5.7%	5.5%	0.4%
Enrollment (Millions)	1.04	5.18	14.12	6.57	3.93	2.66	3.65	0.17
Mean Enrollment	317	461	465	498	509	628	891	589
ADH-P/ADA	0.44	0.34	0.30	0.28	0.23	0.39	0.09	0.33
January 1975								
Number of Schools	3,268	5,329	30,936	13,909	9,790	6,584	4,199	282
- Percent of Schools	4.4%	7.2%	41.6%	18.7%	13.2%	8.9%	5.7%	0.4%
Enrollment (Millions)	1.02	2.22	14.42	6.48	5.25	4.33	3.38	0.15
Mean Enrollment	312	417	466	466	536	657	805	540
ADH-P/ADA	0.51	0.44	0.32	0.28	0.35	0.27	0.18	0.04

Table 26 SMP Operations
Frequency Distribution Of All SMP Schools Serving Whole White Milk By Margin On Whole White Milk, January 1974 And January 1975

	- Margin Per Half-Pint (In Cents) -									
	Less Than 0.25	.025-0.49	0.50-0.74	0.75-0.99	1.00-1.24	1.25-1.50	1.50-1.99	2.00-2.49	2.50-3.50	More Than 3.50
January 1974										
Number of Schools 1/	20,285	2,646	11,115	7,440	8,040	4,498	7,974	3,149	2,640	6,777
- Percent of Schools	27.2%	3.5%	14.9%	10.0%	10.8%	6.0%	10.7%	4.2%	3.5%	9.1%
Enrollment (Millions)	8.35	1.35	5.31	4.03	3.62	2.20	4.29	2.22	1.95	4.90
Mean Enrollment	412	511	478	541	451	489	538	705	738	723
January 1975										
Number of Schools 1/	4,577	2,927	5,703	8,727	7,607	5,562	16,285	7,937	6,500	5,204
- Percent of Schools	6.4%	4.1%	8.0%	12.3%	10.7%	7.8%	22.9%	11.2%	9.3%	7.3%
Enrollment (Millions)	1.91	1.15	2.38	4.73	2.75	2.85	8.39	4.65	3.38	4.04
Mean Enrollment	417	395	417	542	361	513	515	586	520	776

1/ Excludes schools serving milk at no separate charge to students

Table 27 SMP Operations - Day of Survey Distribution of Total Half-Pints of Milk Served in SMP Schools by Type of Milk And by Time of Day

	Unflavored Milk			Flavored Milk				
	Whole	Lowfat	Skim	Whole	Lowfat or Skim	Buttermilk	"Other" Milk	Total
				- NUMBER -				
Number of Half-Pints Served at (Thousands)								
- Breakfast	1,161	14	1	165	13	0	0	1,354
- Lunch	17,710	784	104	5,545	2,653	2	6	26,804
- Nonmealtimes	2,674	25	2	856	124	0	0	3,682
- Total	21,545	824	107	6,567	2,790	2	6	31,841
				- PERCENT -				
Percentage of Total Milk Served								
- Breakfast	3.6	0.0	0.0	0.5	0.0	0.0	0.0	4.3
- Lunch	55.6	2.5	0.3	17.4	8.3	0.0	0.0	84.2
- Nonmealtimes	8.4	0.1	0.0	2.7	0.4	0.0	0.0	11.6
- Total	67.7	2.6	0.3	20.6	8.8	0.0	0.0	100.0

Table 28 SMP Operations - Day of Survey
Percentage of Schools Serving Specified Types of Milk

	SMP Schools		
	Total	With NSLP	Without NSLP
Percentage of Schools Serving Whole White Milk	94.5	94.0	97.8
Percentage of Schools Serving Only Whole White Milk	56.9	57.2	54.9
Percentage of Schools Serving Whole Flavored Milk	28.5	27.4	37.2
Percentage Whole Flavored Milk of Total Milk Served in These Schools	68.5	68.0	76.8
Percentage of Schools Serving Lowfat or Skim Flavored Milk	10.1	11.1	2.7
Percentage Lowfat or Skim Flavored Milk of Total Milk Served in These Schools	71.6	71.7	63.4
Percentage of Schools Serving Lowfat (Unflavored) Milk	5.5	6.0	2.0
Percentage Lowfat (Unflavored) Milk of Total Milk Served in These Schools	41.8	43.2	8.7
Percentage of Schools Serving Skim (Unflavored) Milk	3.7	3.8	2.9
Percentage Skim (Unflavored) Milk of Total Milk Served in These Schools	8.2	8.3	2.6
Percentage of Schools Serving Buttermilk	0.7	0.8	0
Percentage Buttermilk of Total Milk Served in These Schools	0.7	0.7	0

Table 29 SMP Operations - January 1975
Number And Times Of Milk
Service Periods In SMP Schools

	Number of Milk Service Periods				Times of Service	
	One	Two	Three	Four Or More	Lunch Only	Lunch And Between Meals Only 1/
All SMP Schools						
Number of Schools	35,718	21,433	19,114	3,082	34,354	27,316
- Percent of Schools	45.0%	27.0%	24.1%	3.9%	43.3%	34.4%
Mean ADA	486	461	440	583	491	393
ADH-P/ADA	0.26	0.34	0.36	0.18	0.26	0.39
SMP With NSLP Schools						
Number of Schools	30,615	19,353	17,728	2,906	29,609	24,720
- Percent of Schools	43.4%	27.4%	25.1%	4.1%	41.9%	35.0%
Mean ADA	513	484	446	600	515	400
ADH-P/ADA	0.23	0.33	0.35	0.17	0.24	0.38
SMP Without NSLP Schools						
Number of Schools	5,103	2,080	1,385	176	4,745	2,596
- Percent of Schools	58.4%	23.8%	15.8%	2.0%	54.3%	29.7%
Mean ADA	324	243	364	312	337	329
ADH-P/ADA	0.52	0.56	0.55	0.49	0.52	0.51

1/ Does not include schools with breakfast, supper, or continuous milk service.

Table 30 SMP Operations - Day of Survey
Competitive Beverage Effect

	SMP Schools				
	Offering Milk As Only Beverage	Offering Soft Drinks	Offering Other Beverages: Subtotal	Offering Other Beverages: With Soft Drinks	Offering Other Beverages: Without Soft Drinks
Number of Schools	52,397	13,070	20,664	5,758	14,906
- Percent of Schools	65.2%	16.3%	25.7%	7.2%	18.5%
Mean Enrollment	436	622	717	861	661
ADH-P/ADA	0.33	0.23	0.28	0.23	0.30

2 B.M
1.0
1.1
1.25
1.4
1.6
2.8
2.5
3.2
2.2
2.0
1.8
MICROCOPY RESOLUTION TEST CHART

Table 31 SMP Operations - Day of Survey
Types of Milk Containers Used

	Half-Pint Cartons Only	Eight Ounce Glasses Only	Other Only	More Than One Type
Number of SMP Schools Serving Milk in Specified Containers	75,483	1,390	933	2,375
- Percent of Schools	94.1%	1.7%	1.2%	3.0%
Mean Enrollment	520	123	443	365
Number of SMP Public Schools Serving Milk in Specified Containers	66,870	544	853	2,093
- Percent of Public Schools	95.0%	0.8%	1.2%	3.0%
Mean Enrollment	554	218	466	400
Number of SMP Private Schools Serving Milk in Specified Containers	8,613	846	80	282
- Percent of Private Schools	87.7%	8.6%	0.8%	2.9%
Mean Enrollment	257	62	191	103

Table 32 SMP Operations - Day Of Survey
Prevalence Of Automatic Milk Vending
Machines In SMP Schools

	SMP Schools			
		Schools With Milk Vending Machines		
	Schools With No Milk Vending Machines	Subtotal	As Only Form Of Milk Service	Along With Other Form Of Milk Service
Number of Schools	79,545	828	80	748
- Percent of Schools	99.0%	1.0%	0.1%	0.9%
Mean Enrollment	503	984	191	1069

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X. National School Lunch Program Operations

Tables 33 through 39 present the survey data on operations of the NSLP in January 1975. Data were also collected on January 1974 NSLP operations. Except where noted in the following text, these 1974 data revealed no significant operational changes from 1974 to 1975; they are, therefore, not presented in tabular format in this report.

Survey data indicate 83,450 schools in the 48 coterminous States and the District of Columbia participated in the NSLP in January 1975. (Actual program data indicate 85,100 schools in the coterminous area participated in the program that month.) Seventy percent of these schools with 56 percent of NSLP enrollment were at the elementary level, about the same ratio of elementary to secondary as exists among schools without the NSLP. Average daily attendance in NSLP schools measured 92.1 percent of enrollment at both the elementary and secondary levels; that is to say, on an average day that month 7.9 percent of students enrolled were absent from school. In addition to those children recorded absent from school, 1.5 million students, or 3.5 percent of NSLP enrollment nationwide, were involved in organized programs that prevented them from eating lunch at school. Most of these students were at the elementary level, where split-sessions for kindergarten children are often scheduled on either side of the lunch period and account for many of these students being unavailable for lunch. Only 1.4 percent of secondary NSLP enrollment, compared to 4.9 percent of elementary enrollment, was involved in organized programs causing students to be away from school grounds at lunchtime. The bulk of these secondary students were in work-study programs.

About 10.6 million children in January 1975 had approved applications on file to receive free lunches in NSLP schools. Just over 1.0 million students had approved applications to receive reduced-price lunches. This was an increase of over 7 percent in the number of children approved for free lunches and over 90 percent in the number approved for reduced-price lunches from the same month the previous year.

Survey data indicate 23.0 million lunches were served on an average operating day in January 1975 (actual program data show the figure for the coterminous area to be 22.6 million). Almost 38 percent of these lunches were served free, 3 percent at a reduced-price of 20 cents or less, and just over 59 percent served at the full price. About 82 out of every 100 students enrolled and approved for free lunches received a free Type A lunch on an average operating day in January 1975; 68 out of every 100 students enrolled and approved for reduced-price lunches bought a reduced-price lunch on an average day; and 42 out of every 100 students enrolled and not approved for a free or reduced-price lunch bought the full-price Type A lunch on an average day. Overall, participation in the lunch program measured 56.5 percent of average daily attendance in January 1975 (58.7 percent when those students involved in organized programs, which prevent them from eating lunch at school, are subtracted out).

The following summarizes the survey findings with regard to those items which previous study has revealed to have significant impact on NSLP operations, especially on student participation in the program.

Onsite Versus Offsite Food Preparation

Survey data indicate that while onsite food preparation remains the dominant mode, a slow but significant trend toward central preparation and satelliting of Type A meals is occurring. In January 1975, 78.0 percent of NSLP schools prepared the bulk of their food onsite; of these, 83.7 percent prepared food for their own use only, while 16.3 percent prepared food for other schools also. This 78.0 percent figure is down from a figure of 79.8 percent in January 1974, as indicated in data from this survey; these are both down from the 83.1 percent of NSLP schools which the 1972 NSLP Survey indicated had onsite food preparation in March 1972. Almost 91 percent of NSLP secondary schools prepared food onsite in 1975, compared to 73 percent of elementary schools.

The increase in NSLP schools receiving food prepared at another site is probably due in large part to the expansion of the lunch program in recent years, particularly into schools which previously were without food service. In the 3 years between the 1972 NSLP Survey and this study, over 5,000 schools initiated participation in the NSLP, according to actual program data.

Of those NSLP schools which did not prepare food onsite in January 1975, almost 90 percent received food from a kitchen operated by the school system. Foodservice management companies provided food to about 9 percent of those schools which did not prepare their own food, or about 2 percent of all NSLP schools. Schools preparing food onsite for service at other schools had the highest average enrollment of all schools by type of delivery system. Schools receiving food prepared offsite had the lowest average enrollment.

Student participation in the NSLP was markedly higher--at 62 percent (ADL/ADA)--in schools preparing food onsite for consumption at the site school only than in any other type of school. Participation in base schools (onsite schools which prepared food for other schools also) was somewhat lower than that in receiving schools (schools receiving food prepared offsite), but this is principally a reflection of the fact that most of these base schools are at the secondary level, where NSLP participation is traditionally lowest, while most receiving schools are at the elementary level. Elementary base schools had a considerably higher Type A participation rate than did elementary receiving schools (69 percent versus 53 percent) while secondary base schools had the same participation rate (37 percent) as secondary receiving schools.

The type of food delivery system used had little effect on participation by children approved for free and reduced-price lunches. Participation in the program by children paying full price for lunches, however, did vary markedly with the type of food delivery system used.

A La Carte Availability

The number of NSLP schools offering a la carte items in addition to the Type A lunch has grown considerably since the 1972 NSLP Survey. In this earlier study a la carte food service was found to have been available in 10.4 percent of all NSLP schools in March 1972. In the current study "complete" a la carte service was found to have been offered in 13.8 percent of all NSLP schools in January 1974 and in 15.3 percent of all NSLP schools in January 1975. "Complete" a la carte service corresponds to the traditional concept of a la carte service. "Limited" a la carte service was found to have been offered in an additional 33.5 percent of all NSLP schools in January 1975. "Limited" a la carte, as defined in this survey, consisted of only Type A lunch components and/or dessert items being sold separately.

The substantial growth in a la carte availability since the 1972 study is probably due in large part to Public Law 92-433, enacted in September 1972, which eased previous restrictions on food service in competititon with the NSLP. Most of this growth in a la carte availability has been at the secondary level. In March 1972 only 22.8 percent of secondary schools participating in the NSLP offered a la carte service. By January 1975, 40.5 percent of these secondary schools had "complete" a la carte offerings. "Complete" a la carte service was available in only 4.5 percent of NSLP elementary schools in January 1975.

At both the elementary and secondary levels, a la carte availability was associated with high enrollment. Schools with "complete" a la carte service had the highest average enrollment, those with no a la carte the lowest, and those with "limited" a la carte fell in between.

Student participation in the NSLP was much lower in schools offering "complete" a la carte service than in schools with either "limited" or no a la carte offerings. This differnce was seen across Regions and at the elementary level but was especially pronounced at the secondary level, where student participation in the NSLP measured 34 percent in schools with "complete" a la carte service, 52 percent in schools with "limited" a la carte, and 67 percent in schools with no a la carte. For all NSLP schools, participation measured 37 percent in schools which offered "complete" a la carte, 59 percent in schools with "limited" a la carte, and 68 percent in schools with no a la carte service. Participation in the NSLP by type of recipient showed the same pattern: students approved for free, reduced-price, and full-price lunches all had the highest participation rate in schools without a la carte service and the lowest rate in schools with "complete" a la carte service.

Menu Choices

Survey data indicate that offering choices on the Type A menu was not a common practice in NSLP schools. Menu choices on the Type A lunch were reported to be offered more than half the time in 14.5 percent of all NSLP schools and less than half the time in 8.1 percent of all NSLP schools in January 1975; 77.3 percent of all NSLP schools reported never offering Type A menu choices. A significant difference was evident between elementary and secondary schools with respect to the offering of Type A menu choices: over 85 percent of NSLP elementary schools reported never offering Type A menu choices while only 58 percent of NSLP secondary schools indicated that Type A menu choices were never available.

Oddly, student participation rates in the NSLP were lowest in schools which offered Type A menu choices more than half the time (43 percent ADL/ADA) and highest in schools which never offered a choice on the Type A menu (62 percent). This was true at both the elementary and secondary levels and consistent across Regions. While this is the inverse relationship of that expected, there are several possible explanations for it. For one, respondents may have not clearly understood that the question related only to choices on the Type A menu and consequently responded that Type A choices were available when these choices were offered in the form of a la carte service only. Since Type A participation is lowest in schools with "complete" a la carte, this could explain the low participation rates found in those schools which indicated Type A menu choices were available more than half the time. Another possibility is that choices on the Type A menu are offered primarily in schools which have already low participation rates. Whatever the explanation, the relationship seen here should not be taken as a causal one. A number of projects have been reported in which student participation in the NSLP increased with the initiation of Type A menu choices.

Open Versus Closed Campus Policy

An open-campus policy with respect to the lunch period (students could leave the school grounds at lunchtime without special permission) was found to be in effect in 31.9 percent of all NSLP schools in January 1975. A closed-campus policy was in effect in 68.1 percent of all NSLP schools during this month. Open-campus policy was more prevalent among elementary schools, 33.8 percent of which had this policy, than among secondary schools, 27.3 percent of which had this policy. Many older elementary schools, of course, were built on a neighborhood basis, allowing children to walk home for lunch.

Student participation in the NSLP was significantly higher in closed-campus schools than in open-campus schools. In open-campus schools the NSLP participation rate measured 51 percent, while in closed-campus schools it measured 59 percent. The disparity in participation rates between open and closed-campus schools was about equal at both the elementary and secondary levels.

The percentage of open-campus schools recorded in this survey (32) is considerably lower than that recorded in the 1972 NSLP Survey (48 percent). The difference is especially pronounced at the elementary level: in the 1972 survey almost 57 percent of NSLP elementary schools reported an open campus policy; in the current survey only 34 percent of NSLP elementary schools reported an open-campus policy. While sampling variability might account for some of this difference, it could not account for all of it. Since the phraseology of the questions asked in the two studies was substantially the same, it seems likely that a real trend toward closed-campus policy is in evidence. (Earlier studies reported an even higher incidence of open-campus policy than the 48 percent reported in the 1972 survey.) Such a trend could be explained, in part, by the decline in neighborhood schools and the upsurge in student busing seen in recent years. 12/

Publicizing Menus In Advance

Over 89 percent of NSLP schools publicized their Type A menus in advance in January 1975. Menus may be publicized by posting them on bulletin boards, publishing or announcing them in the local media, or by sending circulars home with students. There was almost no variability in the percentage of schools publicizing Type A menus in advance by elementary, secondary, or Regional breakdowns.

Due to widespread popular advocacy of publicizing menus in advance, the percentage of NSLP schools with advance publication of Type A menus has increased from 63 percent in 1958 to 89 percent recorded in both this study and the 1972 NSLP Survey. Yet, despite the success of advocates of advance menu publication, the rate of student participation in the NSLP measured in this study is significantly lower in schools which publicized menus in advance than in schools which did not (55 percent versus 68 percent)--a phenomenon noted in previous studies [2], [10]. While factors other than advance menu publication may very well be responsible for this relationship, the possibility that prior publication of Type A menus causes lower participation in the NSLP should be noted.

12/ The Office of Education, DHEW reports that the percentage of public school students transported to school at public expense increased from 43.4 in 1970 to 51.5 in 1974.

Dining Site

Over 55 percent of NSLP schools used a cafeteria as the dining site in January 1975; 37 percent used a multipurpose room (usually a room that also serves a gymnasium or auditorium); 6 percent used a classroom; and 6 percent used some other facility as a dining site. About 5 percent of NSLP schools used more than one type of facility for dining purposes. Classrooms and multipurpose rooms were used as dining sites relatively more often in elementary schools than in secondary schools; almost 9 percent of NSLP elementary schools used classrooms as dining sites compared to just over 1 percent of secondary schools: over 40 percent of elementary schools used multipurpose rooms compared to under 30 percent of secondary schools. Cafeterias, on the other hand, were relatively more common in secondary schools: over 69 percent of NSLP secondary schools used this facility as a dining site compared to 49 percent of elementary schools. Schools with cafeterias had the largest average enrollment of all NSLP schools by dining site, while schools with classrooms as dining sites had the smallest average enrollment, at both the elementary and secondary levels.

Length of Lunch Period

Over 32 percent of NSLP schools scheduled 25 minutes or less for students to eat lunch in January 1975; over 20 percent scheduled 20 minutes or less. Forty-five percent of NSLP schools scheduled between 26 and 35 minutes for lunch; 16 percent scheduled between 36 and 45 minutes; and 7 percent scheduled over 45 minutes for lunch. Secondary schools allowed students slightly more time for lunch than did elementary schools: 24 percent of NSLP elementary schools scheduled over 30 minutes for lunch as opposed to 35 percent of secondary schools. There was a considerable difference in the amount of time allowed students for lunch between the two westernmost Regions (West-Central and Western) and the other three Regions (Northeast, Southeast, and Midwest): over 45 percent of NSLP schools in the two westernmost Regions allowed over 30 minutes for lunch while under 14 percent of NSLP schools in the other three Regions combined allowed over 30 minutes.

Student participation in the lunch program was highest in schools which allowed 25 minutes or less for lunch, at 64 percent (ADL/ADA), and declined over time intervals to 49 percent (ADL/ADA) in schools which allowed over 45 minutes for lunch. This inverse relationship of time allowed for lunch to participation in the NSLP was found at both the elementary and secondary levels and was generally consistent across Regions. That the relationship of participation to time allowed for lunch is an inverse one rather than a direct one is surprising in view of the widely held notion that a principal constraint to high NSLP participation is the limited amount of time many students have scheduled for lunch. It is possible, of course, that this relationship is not a causal one. It is also possible that as more time is allowed students for lunch the greater the competitive effect becomes of alternate food sources, especially those which require the student to leave the school premises.

Type A Lunch Prices

The average price paid nationwide for a full-price Type A lunch 13/ in January 1975 was 45.7 cents. This was a 6.8 percent increase over the 42.8 cent average price measured in this survey for January 1974. In NSLP elementary schools the average price paid for a full-price Type A lunch in January 1975 was 43.6 cents and in secondary schools it was 49.1 cents. Type A prices rose at about the same rate at both the elementary and the secondary level from January 1974 to January 1975.

The modal price interval for a Type A lunch, by the number of schools charging that price, was the 41-45 cent interval, with 26.0 percent of NSLP schools setting a price for the lunch in this interval. The modal price interval, by the number of students enrolled, however, was the 46-50 cent interval, with 25.4 percent of NSLP enrollment falling into this interval. This points up the direct relationship seen in these data between price charged for lunch and enrollment size: that is, as the price interval increased so did the mean school enrollment. This relationship was evident at both the elementary and secondary levels.

Not surprisingly, participation in the NSLP by children not approved for free or reduced-price meals showed an inverse relationship to the price charged for the full-price lunch: that is, as the price interval increased the student participation rate declined. This relationship was evident at the elementary and secondary levels and by Regional breaks.

Reduced-price lunches were available in January 1975 in 59 percent of NSLP schools to over 64 percent of total NSLP enrollment. This was a substantial increase in reduced-price lunch availability over January 1974, when reduced-price lunches were available in 37 percent of NSLP schools to only 39 percent of total NSLP enrollment. The average price paid for a reduced-price lunch in January 1975 was 17.2 cents. Almost 61 percent of those schools offering reduced-price lunches charged 16-20 cents for these lunches, 15 percent charged from 11-15 cents, and 24 percent charged from 6-10 cents (the high point of these intervals was in most cases the actual price charged). Participation by reduced-price eligibles showed no relationship to the charged for the reduced-price lunch.

13/ The average price paid for a full-price lunch was derived by weighting the price charged in each school for a full-price lunch by the number of lunches served at the full-price in each school. A similar procedure was used for computing the average price paid for a reduced-price lunch.

NSLP Expansion

Survey data indicate over 2,400 schools at the time of interview planned to initiate the NSLP between April 1975 and April 1977. Seventy percent of these schools were at the elementary level. Two-thirds were schools without food service. Many of these schools' plans to initiate the program were in response to recent legislation, passed by several States, mandating NSLP service. If these plans to initiate the program are fully realized, almost one million additional students will have access to the NSLP by April 1977.

Table 33 NSLP Operations - January 1975

	NSLP Schools				
			Without SMP		
	Total	With SMP	Subtotal	With Other Milk Service	With No A La Carte Milk Service
Number of Schools	83,451	70,979	12,471	10,101	2,370
Enrollment (Millions)	44.14	37.76	6.38	5.52	0.86
Mean Enrollment	529	532	511	546	362
Students Unavailable For Lunch 1/ (Millions)	1.48	1.32	0.17	0.16	0.01
Students Approved For Free Lunches (Millions)	10.58	8.62	1.95	1.37	0.58
- Percentage of Enrollment	24.0%	22.8%	30.6%	24.9%	67.7%
Students Approved For R-P Lunches (Millions)	1.00	0.85	0.15	0.13	0.03
- Percentage of Enrollment	2.3%	2.2%	2.4%	2.3%	3.0%
Avg. Daily Lunches (ADL) (Millions) - Total	22.97	19.17	3.80	3.13	0.68
- Full-Price	13.60	11.56	2.04	1.87	0.17
- Free	8.69	7.03	1.66	1.17	0.49
- Reduced-Price	0.68	0.58	0.11	0.09	0.02
ADL/ADA	56.5%	55.1%	65.3%	61.6%	90.2%

1/ Unavailable due to organized programs preventing students from eating lunch at school.

Table 34 NSLP Operations - January 1975
On-Site Versus Off-Site Food Preparation

	On-Site Preparation			Off-Site Preparation			
	For Site School Only	For Other Schools Also	Total On-Site	By A Central Kitchen Operated by the System	By A Foodservice Management Company	Other 1/	Total Off-Site
Number of Schools	54,516	10,601	65,117	16,430	1,678	225	18,333
Enrollment (Millions)	28.72	8.45	37.17	6.16	0.76	0.04	6.96
Mean Enrollment	527	797	571	376	450	156	352
ADL/ADA	62%	44%	58%	50%	51%	15%	50%
ADL-Free & R-P /ADA	25%	18%	23%	21%	43%	10%	23%
ADL-Free & R-P /No. Approved for Free & R-P	82%	75%	81%	81%	82%	74%	81%
ADL-Full-Price/No. Full-Price Students	47%	32%	43%	35%	14%	5%	33%

1/ Includes Parent-Teacher Associations and local restaurant operators.

Table 35 NSLP Operations - January 1975
A La Carte Service

	NSLP Schools			
	With A La Carte	With Complete A La Carte	With Limited A La Carte	With No A La Carte
Number of Schools	40,716	12,772	27,944	42,735
Enrollment (Millions)	26.72	12.57	14.15	17.42
Mean Enrollment	656	984	506	408
Students Approved for Free Lunches (Millions)	5.07	2.25	2.82	5.51
- Percentage of Enrollment	19.0%	17.9%	19.9%	31.7%
Students Approved For Reduced-Price Lunches (Millions)	0.53	0.20	0.32	0.47
- Percentage of Enrollment	2.0%	1.6%	2.3%	2.7%
Avg. Daily Lunches (ADL) (Millions) - Total	11.92	4.22	7.70	11.05
- Full-Price	7.63	2.46	5.17	5.97
- Free	3.95	1.66	2.30	4.73
- Reduced-Price	0.34	0.11	0.23	0.34
ADL/ADA	48.7%	36.9%	59.0%	68.5%
ADL-Free/No. Approved for Free	78%	74%	82%	86%
ADL-R-P/No. Approved for R-P	64%	53%	72%	73%
ADL-Full-Price/No. Full-Price Students	36%	24%	47%	52%

Table 36 NSLP Operations - January 1975
Menu Publication, Open and Closed Campus Policy, Type A Menu Choices

	Publicize Menus In Advance	Do Not Publicize Menus In Advance	Open Campus Policy	Closed Campus Policy	Offer Type A Menu Choices: More Than Half The Time	Less Than Half The Time	Never
Number of Schools	74,392	9,057	26,591	56,859	12,133	6,794	64,522
Enrollment (Millions)	40.28	3.85	13.85	30.29	11.24	4.39	28.51
Mean Enrollment	542	426	521	533	927	646	442
ADL/ADA	55%	68%	51%	59%	43%	52%	62%
ADL Free & R-P /ADA	22%	36%	20%	24%	15%	18%	27%

Table 37 NSLP Operations - January 1975
Dining Site

	Cafeteria	Multi-Purpose Room	Classroom	Other
Number of Schools 1/	46,239	31,129	5,396	5,250
Enrollment (Millions) 1/	29.07	13.68	1.95	2.51
Mean Enrollment	629	439	362	477
ADL/ADA	57%	56%	64%	38%
ADL Free & R-P /ADA	26%	16%	32%	20%

1/ Summing across columns yields totals for schools and enrollment greater than NSLP total for January 1975; about 5 percent of NSLP schools used more than one type of dining site.

Table 38 NSLP Operations - January 1975
Distribution of NSLP Schools By Length of Time
Given Students for Lunch

	Time Scheduled for Lunch (In Minutes)						
	20 Or Less	21 - 25	26 - 30	31 - 35	36 - 40	41 - 45	More Than 45
Number of Schools	17,463	9,319	34,281	3,605	4,961	8,326	5,493
- Percent of Schools	20.9%	11.2%	41.1%	4.3%	5.9%	10.0%	6.6%
Enrollment (Millions)	7.78	5.06	19.38	2.24	2.54	4.39	2.75
Mean Enrollment	445	543	565	622	512	527	500
ADL/ADA	64%	64%	55%	51%	53%	52%	49%

Table 39 NSLP Operations - January 1975
Distribution of NSLP Schools By Charge to Student
for Full-Price Lunch

	Full-Price Lunch Charge (In Cents)						
	30 Cents or Less	31 - 35	36 - 40	41 - 45	46 - 50	51 - 55	More Than 55 Cents
Number of Schools 1/	4,045	10,126	16,390	21,259	18,370	6,084	5,399
- Percent of Schools	5.0%	12.4%	20.1%	26.0%	22.5%	7.4%	6.6%
Enrollment (Millions)	1.34	4.09	6.92	10.38	11.01	4.77	4.90
Mean Enrollment	331	404	422	488	599	783	908
ADL/ADA	84%	68%	66%	61%	55%	43%	34%
ADL Free & R.P./ADA	33%	28%	25%	23%	22%	19%	14%
ADL Full-Price/No. of Full-Price Students	73%	53%	51%	48%	40%	29%	22%

1/ Does not include schools which serve Type A lunch at no separate charge to students (e.g., boarding schools).

XI. School Breakfast Program Operations

Although the design for this survey did not call for estimates to be made on operations of the SBP, 74 SBP schools fell into the sample and a limited number of questions relating to SBP operations were asked in these schools. The estimates produced from these schools' responses do not have the reliability associated with the estimates produced in this study for NSLP and SMP operations, but they are presented here to give some indication of the characteristics of SBP schools and the program's operations. A forthcoming FNS evaluation of the SBP will yield considerably more extensive and reliable data.

Survey data indicate that 11,225 schools in the 48 coterminous States and the District of Columbia operated the SBP in January 1975. (Actual program data indicate that 11,904 schools in this area operated the program in that month.) Over 69 percent of these schools were at the elementary level, about the same percentage of elementary schools found in the NSLP. Both elementary and secondary schools in the SBP tended to have larger enrollments and a higher proportion of needy children than did non-SBP schools. Over 42 percent of children enrolled in SBP schools had approved applications on file to receive free or reduced-price breakfasts in January 1975.

The average charge to the student 14/ for a full-price breakfast in January 1975 was 18.8 cents, an increase of 11 percent over the 17.0 cent average charge recorded for January 1974. Only 69 percent of SBP schools indicated serving any full-price breakfasts in January 1975. The distribution of SBP schools by price charged for breakfast was relatively highly dispersed, but this could be simply a reflection of the small number of SBP schools surveyed. As with lunch participation and lunch prices, participation by children paying the full price for breakfast was inversely related to the charge for breakfast, i.e., highest in schools with a low charge for breakfast and lowest in schools with a high charge for breakfast.

The potential for growth in the SBP was seen to be large. Expanded survey data indicate over 6,100 schools with an enrollment of 3.7 million students had plans in the spring of 1975 to initiate the SBP within the following 2 years. Some dissatisfaction with the program, however, was also detected: expanded survey data indicate almost 1,300 schools discontinued participation in the program within the 2 school years prior to the survey. Low student participation in the program was the most frequently cited reason for discontinuing the SBP.

14/ The average charge for breakfast was computed in the same manner as the average charge for lunch in NSLP schools. See footnote 13.

Table 40 SBP Operations - January 1975

	SBP Schools		
	Total	With SMP	Without SMP
Number of Schools	11,225	8,951	2,274
Enrollment (Millions)	7.38	6.26	1.13
Mean Enrollment	658	699	495
Students Approved For Free Breakfast (Millions)	2.96	2.21	0.75
- Percentage of Enrollment	40.0%	35.2%	66.7%
Students Approved For Reduced-Price Breakfast (Millions)	0.15	0.13	0.03
- Percentage of Enrollment	2.1%	2.0%	2.6%
Avg. Daily Breakfasts (ADB) (Millions) - Total	1.46	1.06	0.40
- Full-Price	0.19	0.15	0.04
- Free	1.23	0.88	0.35
- Reduced-Price	0.04	0.03	0.01
ADB/ADA	22.1%	18.8%	41.8%
ADB-Free/No. Approved For Free	41%	40%	46%
ADB-R-P/No. Approved For R-P	26%	26%	27%
ADB-Full-Price/No. Full-Price Students	5%	4%	12%

Table 41 SBP Operations - January 1975
Charge to Student for Full-Price Breakfast
(In Cents)

	Full-Price Breakfast Charge (In Cents)				
	10 Cents Or Less	11 - 15	16 - 20	21 - 25	More Than 25 Cents
Number of Schools 1/	750	2,180	1,578	2,023	1,192
- Percent of Schools	9.7%	28.2%	20.4%	26.2%	15.4%
Enrollment (Millions)	0.23	0.79	0.66	1.58	1.14
Mean Enrollment	313	364	417	779	959
ADB/ADA	41%	36%	30%	13%	11%
ADB - Free & R-P/ADA	21%	26%	26%	11%	0%
ADB - Full-Price/No. of Full-Price Students	27%	16%	7%	3%	2%

1/ Does not include schools which reported no full-price breakfasts served in January 1975.

XII. Milk and Meal Service Not Under USDA Sponsorship

Other Milk Service

Survey data show 17,900 schools which did not participate in the SMP in January 1975 made milk available on an a la carte basis to students, i.e., had "other milk service." This was an increase of 4,000 schools with other milk service from the same month the previous year, this increase comprising those schools which discontinued participation in the SMP during the previous year but which continued to make milk available on an a la carte basis to students. About 56 percent of these other milk service schools in January 1975 were schools participating in the NSLP, and about 62 percent were at the elementary level. Over 3,300 schools with other milk service did not have food service. Average enrollment size in other milk service schools was roughly comparable to that found in SMP schools.

Average daily sales of a la carte milk in these other milk service schools measured 19 percent of average daily attendance in January 1975, or 38 percent lower than the rate found in SMP schools. As found in the case of the SMP, per capita sales of a la carte milk (average daily half-pints/average daily attendance) in schools with other milk service were slightly higher at the elementary as opposed to the secondary level and substantially higher in schools without as opposed to those with the NSLP.

In schools with other milk service in January of both 1974 and 1975, the average charge to the school for a half-pint of milk 15/ was 9.1 cents in the former month and 9.9 cents in the latter month, an 8 percent increase over this 1 year period. The average charge to the student for milk in these schools was 12.2 cents per half-pint in January 1974 and 13.6 cents in January 1975, a 12 percent increase over this period. Schools with the SMP in January 1974 and other milk service in January 1975 paid

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15/ The average charge for a half-pint of milk in other milk service schools was computed in the same manner as the average charge in SMP schools. Since data were not collected on the distribution of milk served by milk type in other milk service schools, except where one of these schools also participated in the NSLP, the weighting of prices by milk types in other milk service schools was done using the same weights used in SMP schools. Data from those other milk schools which did participate in the NSLP suggest that the distribution of milk by milk type in other milk service schools is very similar to that found in SMP schools.

an average of 9.2 cents for a half-pint of milk in the former month and 9.4 cents for a half-pint in the latter month, a 3 percent increase over this period. The average charge to the student in these schools, however, rose from 7.5 cents per half-pint in January 1974 to 10.7 cents in January 1975, a 41 percent increase, occasioned by the discontinuance of the SMP and consequent loss of milk subsidy in these schools. The average charge to students for a half-pint of milk in January 1975 in schools with the SMP in 1974 and other milk service in 1975 was some 22 percent lower than the average charge in schools which had other milk service in both years.

For all schools with other milk service in January 1975, the average cost to the school for a half-pint of milk was 9.8 cents, 3 percent higher than the average cost to SMP schools, and the average charge to the student for this milk was 13.0 cents, 113 percent higher than the average charge in SMP schools. Over 90 percent of other milk service schools in January 1975 charged 10 cents or more to students for a half-pint of milk, compared to only 6 percent of SMP schools with charges at this level. The average margin on a half-pint of milk in schools with other milk service in January 1975 was 3.2 cents, or double the average margin of 1.6 cents found in SMP schools.

Schools with other milk service in January 1975 tended to offer milk less frequently than did schools participating in the SMP that month. Almost 62 percent of these other milk service schools, compared to 45 percent of SMP schools, made milk available only once per day. As was seen in SMP schools, per capita consumption of a la carte milk was lower--in the case of other milk service schools some 48 percent lower--in schools which made milk available once per day than in those schools which made it available more than once.

Meal Service Outside USDA Sponsorship

Data presented in Section X of this report show in January 1975 12,800 schools which participated in the NSLP also offered complete a la carte service. In addition to these schools, approximately 6,400 schools not participating in the NSLP made food available to students at lunchtime. Almost 62 percent of these non-NSLP schools with food service were at the secondary level and 57 percent were private schools. The average enrollment in these schools was about the same as in NSLP schools. Non-NSLP schools with lunchtime food service constituted 29 percent of all non-NSLP schools.

Survey data also show in January 1975 approximately 6,000 schools which did not participate in the SBP made food available to students at breakfast. Almost 75 percent of these schools were secondary schools and 37 percent were private schools. No data were collected on the extensiveness of the breakfast service in these non-SBP schools. In many cases this breakfast service may have consisted of only juice and donuts.

In addition to those schools which offered a lunch or breakfast service outside the sponsorship of USDA on a regular daily basis, a handful of schools were visited which provided foodservice on an irregular or intermittent basis. In these schools, home economics classes, parent-teacher associations, or individuals in the school community prepared meals for students anywhere from once a month to once or twice a week. These schools are not reflected in the above statistics.

Table 42 Other Milk Service Operations - January 1975

	Schools With Other Milk Service (Non-SMP)			
	Total :	With NSLP :	Without NSLP :	With No Food Service
Number of Schools	17,883	10,101	7,782	3,314
Enrollment (Millions)	9.69	5.52	4.17	1.37
Mean Enrollment	542	546	536	414
Avg. Daily Half-Pints (ADH-P) Served A La Carte (Millions)	1.70	0.73	0.98	0.30
ADH-P/ADA	0.189	0.143	0.247	0.233

Table 43 Non-USDA Food Service - January 1975

	"Complete" Lunchtime A La Carte			Non-SBP Breakfast Service		
	Total	With NSLP	Without NSLP	Total	With NSLP	Without NSLP
Number of Schools	19,198	12,772	6,426	6,642	4,640	2,002
Enrollment (Millions)	16.29	12.57	3.72	5.11	3.74	1.37
Mean Enrollment	848	984	579	769	805	686

XIII. Summary of Narrative Comments

Open-ended questions requiring narrative answers were asked with regard to (1) reasons for discontinuing participation in any of the USDA child nutrition programs, (2) reasons for not initiating one or more of these programs, and (3) general comments about the programs. The responses to (1) were almost entirely from schools which had dropped the SMP and are discussed in Section V of this report. Responses to (2) and (3) are summarized below.

In many schools no narrative responses, or cursory and often vague ones, were given. The usable responses which were supplied, however, cover the gamut of concerns and issues surrounding these programs at the local level. Due to the narrative nature of the respones, the variety of types of respondents (e.g., principals, cafeteria managers, district supervisors), and the number of different expansion factors employed in this survey, a normal statistical treatment of these responses was not possible. Responses have been grouped and ordered in the following narrative by the frequency with which they were given. Concerns expressed by only one or two respondents have generally been omitted.

A. Reasons For Not Initiating A Program

National School Lunch Program

The most frequently cited reason for not initiating the NSLP was a lack of adequate facilities to prepare meals. The second most frequently cited reason was from schools established on a neighborhood basis which reported that children were accustomed to going home for lunch and parents wanted this to continue. Expected difficulty in administering the program was the third most frequently cited reason for not participating in the NSLP. Responses here included "too much government red tape," "excessive bookkeeping," "lack of personnel," and the expectation that the program would not be self-supporting. Lack of community demand for the program, small numbers of needy students, and food waste associated with the program were also cited in a number of schools as reasons for nonparticipation. The desire to maintain independence from the Federal Government was mentioned by several private sectarian school.

School Breakfast Program

Since the SBP is found in fewer schools than is the NSLP or the SMP, the question relating to nonparticipation in the breakfast program generated a large number of responses. By far the most frequently cited reason for not initiating the SBP was scheduling problems. This reason was especially prevalent among schools in which large numbers of students were bused to school. The next most frequently cited reason was a lack of adequate facilities to prepare breakfast, followed by a lack of adequate numbers of personnel for SBP service. A large number of schools cited the expense of the program and their expectation that it would not be self-supporting as reasons for nonparticipation. Another reason frequently given was a lack of needy students enrolled and a low level of anticipated participation.

Special Milk Program

The most frequently cited reason for not participating in the SMP was anticipated difficulty in administering the program ("Too much red tape," "excessive bookkeeping," etc.). A lack of adequate facilities to store milk was the next most frequently cited reason for nonparticipation. Next in order of frequency were: lack of student or community demand for the program; expense of the program and fluctuation of milk prices; and a desire to remain independent of the Federal Government by private sectarian schools. In addition, several schools cited as a reason for nonparticipation in the SMP the lack of time in their class schedule for the required nonlunchtime milk break (Federal regulations require no such milk break). In addition to schools declining to participate in the SMP for the above reasons, a large number of surveyed schools which discontinued participation in the program because of the free milk provision indicated they would not rejoin the program until the free milk provision is rescinded or revised.

B. General Comments on the Program

The bulk of general comments received concerned the NSLP. Commodities were the principal area of interest. Many respondents asked simply that USDA supply more commodities, especially high-protein items (meat and cheese), flour, and oil. Among other respondents commenting on commodities, sentiment was about equally divided between (1) increasing the amount of federally supplied commodities while decreasing the amount of Federal cash subsidy and (2) decreasing or eliminating federally supplied commodities while increasing Federal cash assistance. Many respondents asked for more local input into the selection of commodities, more advance notice of the kinds and amounts of commodities to be received, and more regular deliveries of commodities. Several specific commodities were reported to have poor acceptance by children, and a number of schools suggested that either supply of these commodities be discontinued or schools be given the freedom to refuse these items and substitute others for them.

Institution of a universal free lunch program was the second most frequently discussed topic. All respondents commenting on this were in favor of it, although several respondents suggested a universal reduced-price program as a feasible alternative.

Insufficient flexibility in the Type A pattern was the third most frequently discussed concern. While many respondents objected to specific requirements in the Type A pattern (vegetables, most commonly), others objected to "the push-button mentality of the program: one slice of this, one pat of that." Several respondents in schools receiving pre-packaged meals complained about portion sizes being too small for older students and too large for younger ones. Several respondents suggested restricting the sugar level in the lunch, while several others recommended less starchy foods in the Type A pattern.

Closely tied to insufficient flexibility in the Type A pattern is plate waste, which was the fourth most frequently commented on area of concern. Respondents called for increased flexibility in the Type A pattern to reduce waste, including a reduction in the vegetable requirement and a reduction in portion size for younger students.

Excessive paperwork required in the NSLP was the next most frequently commented on area of concern. A reduction in regulations and red tape was called for by many respondents, although few respondents cited specific ares where they felt such reductions could be made.

Dissatisfaction with the eligibility criteria and the application procedure for free and reduced-price meals was expressed by a number of respondents. Some commenting on this felt that more stringent certification procedures should be mandated. Others expressed their distaste for reviewing applications and learning other people's income. Still, others called for greater latitude to be given to principals in determining a student's eligibility for free and reduced-price meals.

Several respondents complained about the difficulties imposed on running the program at the local level by the frequency of federal legislative and regulatory changes to the program. One respondent called for passage by Congress of 3 to 5 year plans for the program, thereby alleviating the uncertainty and concomitant difficulty currently faced in planning future program operations at the local level.

Other suggestions on NSLP operations included: mandate nutrition education in schools; restrict a la carte sales; prohibit students receiving free lunches from buying a la carte items if they don't finish the Type A Lunch; and USDA should publish a detailed handbook of collection procedures used to serve free and reduced-price meals without overtly identifying recipients.

Very few comments on the SBP were received and almost all were positive. One respondent suggested increasing the amount of protein served in SBP breakfasts. Another respondent, in a school which operated the NSLP, the SBP, and SMP, called the breakfast program by far the best of all three programs.

The majority of comments received on the SMP were concerned with the free milk provision; these have been discussed previously in this report (Section V). Comments on other aspects of the SMP generally paralleled comments on the NSLP. Red tape, excessive milk waste, and advocacy of a universal free milk program were the most frequently cited areas of concern. To reduce milk waste and food waste a number of respondents suggested serving less than 8 ounces of milk to younger children, eliminating midmorning milk, and eliminating service of free SMP milk. Several respondents stated that the milk program was needed only at the elementary level. Several others stated that too much classtime was being taken by serving milk at required "milk breaks"; as noted previously, no Federal requirement mandating "milk breaks" exists.

The vast majority of comments received on the programs were favorable. Many respondents simply said "great programs" and left it at that. One respondent stated, "The NSLP is an integral part of our educational program." Another said, "These are the best federally funded programs the government has." And finally, one respondent commented, "Try to educate a hungry child."

SELECTED BIBLIOGRAPHY

1. Anderson, Kenneth E., "The Special Milk Program: Its Effects on Milk Consumption in St. Louis and Los Angeles Schools, " USDA Marketing Research Report No. 209 (1958).

2. _____, "School Lunch Programs in Elementary and Secondary Schools of the United States," USDA Marketing Research Report No. 262 (1958).

3. _____, "Milk Consumption in the Nation's Schools," USDA Marketing Research Report No. 284 (1958).

4. _____, and Hoofnagle, William S., "Milk Consumption by Children at School and at Home in Relation to Special Milk Program," USDA Marketing Research Report No. 408 (1960).

5. Cook, Hugh L. and Halvorson, Harlow W., "Pupil Response to Experimental Pricing of Milk," University of Wisconsin Agricultural Experiment Station Research Bulletin 190 (1956).

6. Epps, Walter, "Factor's Affecting Participation in the School Lunch Program," (unpublished report), USDA Economic Research Service (1971).

7. Freund, William H., "Lunch Programs in the Nation's Schools," USDA Agricultural Economic Report No. 210 (1971).

8. _____, and Reese, Robert, "Milk and Milk Products in the Nation's Schools," USDA Marketing Research Report No. 716 (1965).

9. Kriesberg, Martin, "Food Service in Private Elementary and Secondary Schools," USDA Marketing Research Report No. 678 (1964).

10. _____, "Food Service in Public Schools," USDA Marketing Research Report No. 681 (1964).

11. USDA Agricultural Marketing Service, "Special School Milk Program Experimental Operation," (unpublished summary of studies in 17 States, 1956).

12. USDA Food and Nutrition Service, "Special Milk Program Survey," (unpublished report, 1971).

13. USDA Food and Nutrition Service, "The Effects of the Discontinuance of the Special Milk Program in the Public Schools of Philadelphia on Milk Consumption and Participation in the National School Lunch Program," (unpublished report, 1972).

14. USDA Food and Nutrition Service, "1972 National School Lunch Program Survey," (1974).

GLOSSARY OF ABBREVIATIONS

ADA.....Average Daily Attendance

ADB.....Average Daily Breakfasts

ADH-P.....Average Daily Half-Pints

ADL.....Average Daily Lunches

DHEW.....U.S. Department of Health, Education, and Welfare

FNS.....Food and Nutrition Service

NSLP.....National School Lunch Program

SBP.....School Breakfast Program

SMP.....Special Milk Program

Type A lunch...A lunch receiving reimbursement under the NSLP

USDA.....U.S. Department of Agriculture

SMP-1
UNITED STATES DEPARTMENT OF AGRICULTURE
Food and Nutrition Service
and
Statistical Reporting Service

O. M. B. Number 40-S74096
Approval Expires 6-30-75 286

1975 SPECIAL MILK PROGRAM SURVEY

The Statistical Reporting Service is acting as the collecting agent for the Food and Nutrition Service in this survey. Information is needed to assess the role of the Special Milk Program in schools and its impact on child nutrition programs. All information given will be kept confidential and will be used only for statistical purposes in combination with similar reports from other schools across the Nation.

Name of School: _____

Street Address: _____

City: _____ **State:** _____ **Zip Code:** _____

County: _____

Name of Principal: _____ **Phone No.:** _____

Appointment date and time: _____

Respondents:

School administrator _____

School food supervisor _____

District or area food supervisor _____

Other *(specify)* _____

ENUMERATOR'S SIGNATURE: _____

TYPE OF INTERVIEW	DATE	STARTING TIME	ENDING TIME
Telephone			
School			
School			
Student or Class			
Student or Class			

OFFICE USE

SECTION I. ENROLLMENT AND FOOD SERVICE PROGRAMS

1. Is this a public or private school? ☐ 1 = Public ☐ 2 = Private..... Enter Code [300]

2. Was this school classified as _____ as of _____?
(specify) (date)

(Read list and check one for each year.)

	January 1, 1974	January 1, 1975
a. An elementary school. *(Pre-kindergarten thru 6th grade.)*	☐	☐
b. A secondary school *(7th thru 12th grades)*	☐	☐
c. Other *(Specify _____)*	☐	☐

ENUMERATOR NOTE: Do NOT check "other" if the majority of the students enrolled are at the elementary or secondary level.

3. What was the lowest grade level and highest grade level in this school on each of the following dates? *(Include pre-kindergarten, kindergarten as well as first through twelfth grades.)*

	January 1, 1974	January 1, 1975
a. Lowest grade level in this school		
b. Highest grade level in this school		

OFFICE USE

	January 1, 1974	January 1, 1975
4. Was this school operating on a SPLIT-SESSION basis as of _____? (date)	104 YES ☐ - 1 NO ☐	204 YES ☐ - 1 NO ☐
5. What was the TOTAL ENROLLMENT for this school as of _____? (date)	101	201

6. What was the **AVERAGE DAILY ATTENDANCE** for all classes in _____:
(date)

a. **January 1974?** ..... No. of Students [102]

Approximately how many of these students *(Item 6a)* were involved in **organized** programs that prevented them from eating lunch at school? *(Such as split-session kindergartens, day-care centers for elementary students and work-study programs for secondary students.)* ..... No. of Students [103]

b. **January 1975?** ..... No. of Students [202]

Approximately how many of these students *(Item 6b)* were involved in **organized** programs that prevented them from eating lunch at school. *(Such as split-session kindergartens, day-care centers for elementary students and work-study programs for secondary students.)* ..... No. of Students [203]

7. What is the **ACTUAL ATTENDANCE** for all classes **TODAY**?..... No. of Students [301]

Approximately how many of these students *(Item 7)* were involved in **organized** programs that prevented them from eating lunch at school? *(Such as split-session kindergartens, day-care centers for elementary students and work-study programs for secondary students.)* ..... No. of Students [302]

8. What is your estimate of the number of **ECONOMICALLY NEEDY** students enrolled in January 1975? ..... No. of Students [205]

NEXT WE WOULD LIKE TO KNOW ABOUT THE FOOD SERVICE THAT HAS BEEN AVAILABLE TO YOUR STUDENTS.

9. Which of the following **FOOD** or **MILK** services were in operation in this school in January of the years indicated? *(Read list and check.)*

SERVICES IN OPERATION	January 1972	January 1973	January 1974	January 1975
BREAKFAST				
1. USDA School Breakfast Program (SBP)	073 YES ☐ - 1 NO ☐	083 YES ☐ - 1 NO ☐	183 YES ☐ - 1 NO ☐	283 YES ☐ - 1 NO ☐
2. Other breakfast service	074 YES ☐ - 1 NO ☐	084 YES ☐ - 1 NO ☐	184 YES ☐ - 1 NO ☐	284 YES ☐ - 1 NO ☐
LUNCH				
1. USDA National School Lunch Program (NSLP)	075 YES ☐ - 1 NO ☐	085 YES ☐ - 1 NO ☐	185 YES ☐ - 1 NO ☐	285 YES ☐ - 1 NO ☐
2. A la carte service: a. Complete a la carte service	076 YES ☐ - 1 NO ☐	086 YES ☐ - 1 NO ☐	186 YES ☐ - 1 NO ☐	286 YES ☐ - 1 NO ☐
b. Only Type A lunch components and/or dessert items sold separately	077 YES ☐ - 1 NO ☐	087 YES ☐ - 1 NO ☐	187 YES ☐ - 1 NO ☐	287 YES ☐ - 1 NO ☐
MILK				
1. USDA Special Milk Program (SMP)	078 YES ☐ - 1 NO ☐	088 YES ☐ - 1 NO ☐	188 YES ☐ - 1 NO ☐	288 YES ☐ - 1 NO ☐
2. Other milk service	079 YES ☐ - 1 NO ☐	089 YES ☐ - 1 NO ☐	189 YES ☐ - 1 NO ☐	289 YES ☐ - 1 NO ☐
NO FOOD OR MILK SERVICE	080 YES ☐ - 1 NO ☐	090 YES ☐ - 1 NO ☐	190 YES ☐ - 1 NO ☐	290 YES ☐ - 1 NO ☐

ENUMERATOR NOTE: *If this school* **discontinued participation** *in any of the (Item 9) USDA programs* **in 1974 or 1975,** *ask Item 10.*

10. What were the reasons for discontinuing your school's participation in the _____ program?
(specify)

a. National School Lunch Program (NSLP) _____

_____

_____

_____

b. School Breakfast Program (SBP) _____

_____

_____

_____

c. Special Milk Program (SMP) _____

_____

_____

_____

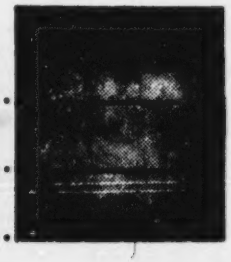
11. During the next two years, does this school plan to initiate participation in any USDA programs not now being used? 342

☐ YES – *Enter Code 1 and continue*..... Enter Code

☐ NO – *Skip to Item 13.*

12. Which of the following USDA programs will be initiated and when? *(Check appropriate programs and indicate date.)*

	Year	Month
☐ National School Lunch Program..... *Date*	_____	.....
☐ School Breakfast Program..... *Date*	_____	.....
☐ Special Milk Program..... *Date*	_____	.....



ENUMERATOR NOTE: For programs not currently in operation in this school -- refer to Item 9 -- and not expected to be initiated in the next two years, ask Item 13.

13. Briefly, could you tell me why the _____ program will not be initiated?
(specify)

a. National School Lunch Program (NSLP) _____

b. School Breakfast Program (SBP) _____

c. Special Milk Program (SMP) _____

14. The U. S. Department of Agriculture is concerned with improving the child nutrition programs it administers. We are interested in any comments or suggestions you care to make on these programs, even if you do not participate in them.

a. National School Lunch Program (NSLP) _____

_____

_____

_____

b. School Breakfast Program (SBP) _____

_____

_____

_____

c. Special Milk Program (SMP) _____

_____

_____

_____

d. Other Comments _____

_____

_____

_____

_____

_____

_____

_____

WE WOULD LIKE TO SELECT TWO CLASSES AND ADMINISTER A QUESTIONNAIRE TO STUDENTS AND OBTAIN INFORMATION ON TYPES OF LUNCHES EATEN, MILK CONSUMED, ETC. NOW I WOULD LIKE TO SEE A SCHEDULE OF ALL YOUR CLASSES IN THIS SCHOOL AND SELECT THE TWO CLASSES THAT WILL BE GIVEN THE STUDENT QUESTIONNAIRE.

ENUMERATOR NOTE: *Refer to Item 9. If this school is in the NSLP and/or SMP, check the appropriate program boxes on the Milk Waste Tally Sheet.*

SECTION II. FOR SCHOOLS CURRENTLY PARTICIPATING IN THE USDA SCHOOL BREAKFAST PROGRAM

1. How many days did your school have breakfast service in _____ (date)? ..... Days

January 1974	January 1975
106	206

2. How many of each of the following types of breakfasts were served in _____ (date)?

	January 1974	January 1975
a. Full price breakfasts ..... Number	107	207
b. Reduced price breakfasts ..... Number	108	208
c. Free breakfasts ..... Number	109	209
d. Total breakfasts ..... Number		

3. How much were students charged for each of the following types of breakfasts in _____ (date)?
(If only one price was charged, enter it under "low.")

	January 1974		January 1975	
	Low	High	Low	High
a. Full price breakfasts ..... Cents	111 .0	112 .0	211 .0	212 .0
b. Reduced price breakfasts ..... Cents	113 .0	114 .0	213 .0	214 .0

4. How many students were certified to receive each of the following types of breakfasts in _____ (date)?

	January 1974	January 1975
a. Reduced price breakfasts ..... Number	115	215
b. Free breakfasts ..... Number	116	216
c. Total certified ..... Number		

5. How many of each of the following USDA breakfasts were served today?

	Today
a. Full price breakfasts ..... Number	307
b. Reduced price breakfasts ..... Number	308
c. Free breakfasts ..... Number	309
d. Total breakfasts ..... Number	

NOTES:

SECTION III. FOR SCHOOLS CURRENTLY PARTICIPATING IN THE USDA NATIONAL SCHOOL LUNCH PROGRAM

	January 1974	January 1975
1. How many days did your school operate a lunch service in _____ (date)? ..... Days	118	218

2. How many of each of the following **Type A lunches** were served in _____ (date)?

	January 1974	January 1975
a. Full price lunches ..... Number	119	219
b. Reduced price lunches ..... Number	120	220
c. Free lunches ..... Number	121	221
d. Total lunches ..... Number		

3. How much were students **charged** for each of the following Type A lunches in _____ (date)?
(If only one price was charged, enter it under "low.")

	January 1974		January 1975	
	Low	High	Low	High
a. Full price lunches ..... Cents	123 .0	124 .0	223 .0	224 .0
b. Reduced price lunches ..... Cents	125 .0	126 .0	225 .0	226 .0

4. How many students were **certified** to receive each of the following Type A lunches in _____ (date)?

	January 1974	January 1975
a. Reduced price lunches ..... Number	127	227
b. Free lunches ..... Number	128	228
c. Total certified ..... Number		

5. Approximately what was the average length of time given each student for his lunch period in _____ (date)? ..... Minutes per Day

January 1974	January 1975
130	230
131	231

6. How many **serving lines** or **stations** served Type A lunches at the peak serving time in _____ (date)? ..... Number

7. **WHERE** were lunches served at your school in _____ (date)?
(Read list and check.)

	January 1974	January 1975
a. Multi-purpose room	132 YES ☐ - 1 NO ☐	232 YES ☐ - 1 NO ☐
b. Cafeteria	133 YES ☐ - 1 NO ☐	233 YES ☐ - 1 NO ☐
c. Classroom	134 YES ☐ - 1 NO ☐	234 YES ☐ - 1 NO ☐
d. Some other place *(Specify* _____)	135 YES ☐ - 1 NO ☐	235 YES ☐ - 1 NO ☐

8. With respect to the lunch period, did this school operate on an **open** or **closed** campus basis in _____? *(Check)*
(date)

	January 1974	January 1975
a. **OPEN** campus -- students could leave for lunch	136 YES ☐ - 1 NO ☐	236 YES ☐ - 1 NO ☐
b. **CLOSED** campus -- students could **not** leave for lunch	137 YES ☐ - 1 NO ☐	237 YES ☐ - 1 NO ☐

9. Were menus for Type A lunches regularly **publicized** in advance in _____?
(date)

January 1974	January 1975
138 YES ☐ - 1 NO ☐	238 YES ☐ - 1 NO ☐

10. Were **choices available** for Type A lunches on _____ of the days in _____?
(specify) *(date)*

January 1974	January 1975
139 More than ½.. ☐ 1 Less than ½ . ☐ 2 None..... ☐ 3	239 More than ½.. ☐ 1 Less than ½ . ☐ 2 None..... ☐ 3

11. Was **all** or **most** of the food for lunches prepared at this school or was it prepared elsewhere in _____? *(Check)*
(date)

	January 1974	January 1975
a. At this school	140 YES ☐ - 1 NO ☐	240 YES ☐ - 1 NO ☐
– OR –		
b. Elsewhere	141 YES ☐ - 1 NO ☐	241 YES ☐ - 1 NO ☐

ENUMERATOR NOTE: Ask Item 12 only if food **was prepared** *at this school.*

12. Was food prepared for this school only or other schools as well in _____? *(Check)*
(date)

	January 1974	January 1975
a. This school only	142 YES ☐ - 1 NO ☐	242 YES ☐ - 1 NO ☐
– OR –		
b. Other schools also	143 YES ☐ - 1 NO ☐	243 YES ☐ - 1 NO ☐

ENUMERATOR NOTE: Ask Item 13 only if food was prepared **elsewhere.**

13. Was food prepared by _____ in _____?
(specify) *(date)*
(Read list and check.)

	January 1974	January 1975
a. Food service management company	144 YES ☐ - 1 NO ☐	244 YES ☐ - 1 NO ☐
b. Kitchen operated by school system	145 YES ☐ - 1 NO ☐	245 YES ☐ - 1 NO ☐
c. Other *(Specify* _____*)*	146 YES ☐ - 1 NO ☐	246 YES ☐ - 1 NO ☐

NOTES:

SECTION IV. FOR SCHOOLS CURRENTLY WITH MILK SERVICE (SMP AND NON-SMP)

NOW WE WOULD LIKE TO KNOW ABOUT MILK SERVICE WHICH HAS BEEN AVAILABLE TO YOUR STUDENTS.

1. For each of the following types of milk, what was (a) the **COST PER HALF-PINT** container **PAID TO SUPPLIERS** and (b) the cost **PAID BY STUDENTS** during January of 1974 and 1975? *(If type not served at this school, please check.)*

TYPE OF MILK	Not Served (✓)	COST PER HALF-PINT Paid TO Suppliers (Cents to Hundredths)	COST PER HALF-PINT Paid BY Students (Cents)
JANUARY 1974			
Whole milk		147 ___.___	154 ___.00
Flavored *(chocolate, etc.)* whole milk		148 ___.___	155 ___.00
Skim milk		149 ___.___	156 ___.00
Lowfat milk		150 ___.___	157 ___.00
Flavored *(chocolate, etc.)* lowfat or skim milk		151 ___.___	158 ___.00
Buttermilk		152 ___.___	159 ___.00
Other milk *(Specify ____)*		153 ___.___	160 ___.00
JANUARY 1975			
Whole milk		247 ___.___	254 ___.00
Flavored *(chocolate, etc.)* whole milk		248 ___.___	255 ___.00
Skim milk		249 ___.___	256 ___.00
Lowfat milk		250 ___.___	257 ___.00
Flavored *(chocolate, etc.)* lowfat or skim milk		251 ___.___	258 ___.00
Buttermilk		252 ___.___	259 ___.00
Other milk *(Specify ____)*		253 ___.___	260 ___.00

	January 1974	January 1975
2. How many days did your school operate milk service in _____ *(date)*? ..... Days	161	261
3. Did this school receive reimbursement, other than Federal, for milk served to students in _____ *(date)*?	162 YES ☐ - 1 NO ☐	262 YES ☐ - 1 NO ☐
If YES, continue with a and b. If NO, go to Item 4.		
a. How much was reimbursed per half-pint from other than Federal sources? ..... Cents	163 ___.___	263 ___.___
b. What were the sources of this reimbursement? ..... Specify		

4. **What was the total number of half-pints of milk served separately in *(date)* _____ ?** ..... Number
(Exclude those served as part of a USDA breakfast or a Type A lunch. Exclude those served to adults.)

January 1974	January 1975
264	264

5. **How many half-pints of milk served separately were FREE in January 1975?** ..... Number
(Exclude those served as part of a USDA breakfast or a Type A lunch. Exclude those served to adults.)

January 1975
265

6. *Complete columns a and b. Complete column c if this school participated in the SMP in 1975. (Refer to page 4, Item 9.)*

a. **WHEN** was milk offered to students at your school? *(Read list and check.)*	MILK OFFERED TO STUDENTS		
	January 1974 *(Check ✓)*	January 1975 *(Check ✓)*	January 1975 **FREE** *(Check ✓)*
	a	b	c
Breakfast	166 YES ☐ - 1 NO ☐	266 YES ☐ - 1 NO ☐	276 YES ☐ - 1 NO ☐
Mid-morning	167 YES ☐ - 1 NO ☐	267 YES ☐ - 1 NO ☐	277 YES ☐ - 1 NO ☐
Lunch	168 YES ☐ - 1 NO ☐	268 YES ☐ - 1 NO ☐	278 YES ☐ - 1 NO ☐
Mid-afternoon	169 YES ☐ - 1 NO ☐	269 YES ☐ - 1 NO ☐	279 YES ☐ - 1 NO ☐
Continuously available*	170 YES ☐ - 1 NO ☐	270 YES ☐ - 1 NO ☐	280 YES ☐ - 1 NO ☐
Other *(Specify _____)*	171 YES ☐ - 1 NO ☐	271 YES ☐ - 1 NO ☐	281 YES ☐ - 1 NO ☐

**Milk available through vending machines, snack bar, etc., which is always open.*

b. **WHERE** was milk offered to students in _____ *(date)*? *(Read list and check.)*

	January 1974	January 1975
(1) Multi-purpose room	172 YES ☐ - 1 NO ☐	272 YES ☐ - 1 NO ☐
(2) Cafeteria	173 YES ☐ - 1 NO ☐	273 YES ☐ - 1 NO ☐
(3) Classroom	174 YES ☐ - 1 NO ☐	274 YES ☐ - 1 NO ☐
(4) Some other place *(Specify _____)*	175 YES ☐ - 1 NO ☐	275 YES ☐ - 1 NO ☐

SECTION V. FOR SCHOOLS PARTICIPATING IN THE SPECIAL MILK PROGRAM

1. In what type of containers is milk offered to students in your school? *(Read list and check one or more.)*

a. Half-pint cartons	311	YES ☐ - 1 NO ☐
b. One pint cartons	312	YES ☐ - 1 NO ☐
c. Eight ounce glasses	313	YES ☐ - 1 NO ☐
d. Other *(Specify* _____ *)*	314	YES ☐ - 1 NO ☐

ENUMERATOR NOTE: Ask Item 2 if more than one type of container is checked in Item 1.

OFFICE CODE

2. Which type of container was used the most? _____

3. Is milk available to students in vending machines?	316	YES ☐ - 1 NO ☐
a. If YES, is this the only manner in which milk is dispensed?	317	YES ☐ - 1 NO ☐
4. Are soft drinks available to students?	318	YES ☐ - 1 NO ☐
a. If YES, are they available at the same time(s) milk is offered?	319	YES ☐ - 1 NO ☐
5. Are any other beverages available to students at the same time(s) milk is offered?	320	YES ☐ - 1 NO ☐

a. If YES, what are the other beverages? _____

_____

_____

6. How many students are currently certified to receive free milk? .....Number	321	
7. How many students were certified to receive free milk in January 1975? .....Number	282	

ENUMERATOR NOTE: Ask Item 8 only if there is a positive entry in Item 6.

8. What method(s) does this school use to protect the identity of "Free Milk" recipients?

_____

_____

_____

_____

SECTION VI. LUNCHROOM RECORD
(USDA PROGRAM SCHOOLS ONLY)

ALL INFORMATION REQUESTED IN THIS SECTION PERTAINS TO **TODAY,** _____.
(Date)

1. How many half-pints of each of the following types of milk were served at (a) breakfast, (b) lunch, and (c) non-mealtime?

TYPE OF MILK	NUMBER OF HALF-PINTS SERVED			
	Breakfast (a)	Lunch (b)	Non-mealtime (c)	Total (d)
Whole milk	322	330	376	
Flavored *(chocolate, etc.)* whole milk	323	331	377	
Skim milk	324	332	378	
Lowfat milk	325	333	379	
Flavored *(chocolate, etc.)* lowfat or skim milk	326	334	380	
Buttermilk	327	335	381	
Other milk *(Specify* _____*)*	328	336	382	
Total half-pints				

ENUMERATOR NOTE: If this school is in the NSLP complete the following question.

2. How many of each of the following **Type A lunches** were served today?

a. Full price	Number	338
b. Reduced price	Number	339
c. Free	Number	340
d. Total lunches	Number	

NOTES:

SMP-3
UNITED STATES DEPARTMENT OF AGRICULTURE
Food and Nutrition Service
and
Statistical Reporting Service

O. M. B. Number 40-S74096
Approval Expires 6-30-75

OFFICE USE ONLY				
FNS Region	FIPS Code	Sample No.	State	Form 3

001

1975 SPECIAL MILK PROGRAM SURVEY

– Student Questionnaire –
(Afternoon Session)

005

007

Name: _____ Date: _____

Grade: _____ Name of School: _____

1. Are you a .....*(Check one)* ☐ Boy ☐ Girl

2. Were you in school at any time yesterday? *(Check one)* ☐ Yes ☐ No

3. Did you have lunch at school today? *(Check one)*

☐ Yes – *Complete item 4.*	☐ No – *Complete item 5.*
4. If YES, which of the following kinds of lunch did you have at school today? *(Check as many as you had.)*	5. If NO, please check below where you had lunch.
☐ Complete school lunch	☐ I didn't eat lunch today
☐ Bought individual food items (a la carte)	☐ Home
☐ Carried lunch from home	☐ A restaurant, lunch counter, or carry-out
	☐ Some other place

– CONTINUE WITH ITEM 6. –

6. Now we'd like to know how much milk you drink **MOST OF THE TIME** on school days. *(Circle how many cartons or glasses of milk you drink.)*

   a. Most of the time, how many cartons or glasses of milk do you drink at school?

   0 1 2 3 4 More than 4

   b. Most of the time, how many cartons or glasses of milk do you drink away from school?

   0 1 2 3 4 More than 4

7. Now we'd like to know how much milk you drank **YESTERDAY**? *(Circle how many cartons or glasses of milk you drank.)*

   a. Yesterday, how many cartons or glasses of milk did you drink at school?

   0 1 2 3 4 More than 4

   b. Yesterday, how many cartons or glasses of milk did you drink away from school?

   0 1 2 3 4 More than 4

8. When do you think are the best times to have milk at school? *(Check as many as you think.)*

   ☐ First thing in the morning
   ☐ Mid-morning
   ☐ Lunchtime
   ☐ Mid-afternoon
   ☐ End of school day
   ☐ Don't care

9. Do you get milk at your school at the times you would like it?

   ☐ Yes ☐ No ☐ Don't care when milk is served.

10. Do you ever bring milk from home to school?

    ☐ Yes ☐ No

SMP-4
UNITED STATES DEPARTMENT OF AGRICULTURE
Food and Nutrition Service
and
Statistical Reporting Service

O. M. B. Number 40-574096
Approval Expires 6-30-75

OFFICE USE ONLY

FNS Region	FNS Code	Sample No.	Strata	Form
				4

001

008

ENUMERATOR:
(Check programs this school is in.)

☐ – SMP only.

☐ – SMP and NSLP.

☐ – NSLP without SMP.

1975 SPECIAL MILK PROGRAM SURVEY

– Milk Waste Tally Sheet –

Name of school:

Date:

Length of Lunch Period ..... Min.

Item	SAMPLE NUMBER 1 Half-pints	1 Other	2 Half-pints	2 Other	3 Half-pints	3 Other	4 Half-pints	4 Other	OFFICE USE
1. Number of cartons:									370
a. COMPLETELY consumed..									371
b. PARTIALLY consumed.....									372
c. UNOPENED.....									373
d. Total (a + b + c).....									374
2. Quantity of milk REMAINING in partially consumed cartons.....(Ounces)									004
3. Time count began									
4. Time count ended									

U.S. GOVERNMENT PRINTING OFFICE : 1974 O-561-515/FNS-60

Enumerator: _____

144

145

39